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<210> 5832

<211> 322

<212> PRT

<213> Homo sapiens

<400> 5832

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			20					25					30		
His	Lys	Glu	Phe	Gln	Gln	Asn	Asn	Trp	His	Ala	Val	Gly	Cys	Gly	Phe
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Ala	Val	His	His	Ile	Ile	His	Asp	Phe	Gln	Pro	His	Val	Ile	Val	His
65				70					75					80	
Cys	Ala	Ala	Glu	Arg	Arg	Pro	Asp	Val	Val	Glu	Asn	Gln	Pro	Asp	Ala
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Ala	Ser	Gln	Leu	Asn	Val	Asp	Ala	Ser	Gly	Asn	Leu	Ala	Lys	Glu	Ala
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Asp	Gly	Thr	Asn	Pro	Pro	Tyr	Arg	Glu	Glu	Asp	Ile	Pro	Ala	Pro	Leu
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Asn	Leu	Tyr	Gly	Lys	Thr	Lys	Leu	Asp	Gly	Glu	Lys	Ala	Val	Leu	Glu
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			165					170					175		
Val	Glu	Lys	Leu	Glu	Glu	Ser	Ala	Val	Thr	Val	Met	Phe	Asp	Lys	Val
			180					185					190		
Gln	Phe	Ser	Asn	Lys	Ser	Ala	Asn	Met	Asp	His	Trp	Gln	Gln	Arg	Phe
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225				230					235					240	
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Phe	Asn	Leu	Pro	Ser	Ser	His	Leu	Arg	Pro	Ile	Thr	Asp	Ser	Pro	Val
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Leu	Gly	Ala	Gln	Arg	Pro	Arg	Asn	Ala	Gln	Leu	Asp	Cys	Ser	Lys	Leu
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Glu	Thr	Leu	Gly	Ile	Gly	Gln	Arg	Thr	Pro	Phe	Arg	Ile	Gly	Ile	Lys
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Phe	His														

<210> 5833
 <211> 805
 <212> DNA
 <213> Homo sapiens

<400> 5833
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 180
 ttcagtgggtg tggctcgaag aggaaagaaa atttttgtct tggggcccaa atacagtcct
 240
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 420
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 480
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<210> 5834
 <211> 268
 <212> PRT
 <213> Homo sapiens

<400> 5834
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 35 40 45
 Asn Asn Gln Glu Ser Phe Ile Ala Phe Ala Arg Val Phe Ser Gly Val
 50 55 60
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Tyr	Leu	Leu	Met	Gly	Arg	Glu	Leu	Glu	Tyr	Leu	Glu	Glu	Val	Pro	Pro
115				120				125							
Gly	Asn	Val	Leu	Gly	Ile	Gly	Gly	Leu	Gln	Asp	Phe	Val	Leu	Lys	Ser
130				135				140							
Ala	Thr	Leu	Cys	Ser	Leu	Pro	Ser	Cys	Pro	Pro	Phe	Ile	Pro	Leu	Asn
145				150				155				160			
Phe	Glu	Ala	Thr	Pro	Ile	Val	Arg	Val	Ala	Val	Glu	Pro	Lys	His	Pro
165				170				175							
Ser	Glu	Met	Pro	Gln	Leu	Val	Lys	Gly	Met	Lys	Leu	Leu	Asn	Gln	Ala
180				185				190							
Asp	Pro	Cys	Val	Gln	Ile	Leu	Ile	Gln	Glu	Thr	Gly	Glu	His	Val	Leu
195				200				205							
Val	Thr	Ala	Gly	Glu	Val	His	Leu	Gln	Arg	Cys	Leu	Asp	Asp	Leu	Lys
210				215				220							
Glu	Arg	Phe	Ala	Lys	Ile	His	Ile	Ser	Val	Ser	Glu	Pro	Ile	Ile	Pro
225				230				235				240			
Phe	Arg	Glu	Thr	Ile	Thr	Lys	Pro	Pro	Lys	Val	Asp	Met	Val	Asn	Glu
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<210> 5835
<211> 420
<212> DNA
<213> Homo sapiens
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120
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ttctttgatg tgttggggaa tgacaggagg agagaatggg cagccctggg aaacatgtct
240
aaagaggatg ccatggtgga gtttgtcaag ctcttaaata ggtgttgcca tctcttttca
300
acatatgttg cgtcccacaa aatagagaag gaagagcaag acaaaaaaag gaaggaggaa
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<210> 5836
<211> 140
<212> PRT
<213> Homo sapiens
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Ala Leu Arg Phe Phe Lys Glu Lys Asp Gly Lys Ala Phe His Pro Thr

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			20					25					30			
Tyr	Glu	Glu	Lys	Leu	Lys	Leu	Val	Ala	Leu	His	Lys	Gln	Val	Leu	Met	
		35					40					45				
Gly	Pro	Tyr	Asn	Pro	Asp	Thr	Cys	Pro	Glu	Val	Gly	Phe	Phe	Asp	Val	
	50					55					60					
Leu	Gly	Asn	Asp	Arg	Arg	Arg	Glu	Trp	Ala	Ala	Leu	Gly	Asn	Met	Ser	
65					70					75					80	
Lys	Glu	Asp	Ala	Met	Val	Glu	Phe	Val	Lys	Leu	Leu	Asn	Arg	Cys	Cys	
				85					90					95		
His	Leu	Phe	Ser	Thr	Tyr	Val	Ala	Ser	His	Lys	Ile	Glu	Lys	Glu	Glu	
			100					105					110			
Gln	Asp	Lys	Lys	Arg	Lys	Glu	Glu	Glu	Glu	Arg	Arg	Arg	Arg	Glu	Glu	
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<210> 5837
<211> 582
<212> DNA
<213> Homo sapiens
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360
ggcggcagga gcatctagaa acgggagcga gctggactgg aacccttccc ctctctggcc
420
accgctcttc gggcggcagc aacctgagat taaacaccag acacccttgg cctggggtca
480
cgaggaaggg gctgcagttc tccaaggatt ccgcctgct cccagatccc cgggagtcgt
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aggaaccctg tcttgacgc tgacgtcggc ttccagggat cc
582

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<210> 5838
<211> 88
<212> PRT
<213> Homo sapiens
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<400> 5838
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Phe Ser Met Leu Cys Cys Phe Trp Pro Val Gly Ile Ala Ala Phe Cys
          20             25             30
Leu Ala Gln Lys Thr Asn Lys Ala Trp Ala Lys Gly Asp Ile Gln Gly

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	35		40		45										
Ala	Gly	Ala	Ala	Ser	Arg	Arg	Ala	Phe	Leu	Leu	Gly	Val	Leu	Ala	Val
	50					55					60				
Gly	Leu	Gly	Val	Cys	Thr	Tyr	Ala	Ala	Ala	Leu	Val	Thr	Leu	Ala	Ala
65					70					75					80
Tyr	Leu	Ala	Ser	Arg	Asp	Pro	Pro								
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<210> 5839
 <211> 1895
 <212> DNA
 <213> Homo sapiens

<400> 5839
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 120
 cattcgaatg catcccaacc agtgctcagc tgcgtaacga catggagaga ggcagggggg
 180
 aatagaaagc aaatttaaaa acaccaacac ccaaacacac aagactgcac acaagaaaaa
 240
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 480
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 1200

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 1260
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 1380
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 1500
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 1740
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<210> 5840
 <211> 138
 <212> PRT
 <213> Homo sapiens

<400> 5840
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 35 40 45
 Pro Arg Gly Ser Gly Phe Pro Ala Gln Gly Ile Phe Asp Pro Cys Gln
 50 55 60
 Arg Arg Glu Arg Glu Leu Ser Trp Phe Pro Phe His Leu Phe Ser Gly
 65 70 75 80
 Cys Phe Lys Ala Asn Ile Pro Val Pro Asn Val Leu Cys Gly Leu Asn
 85 90 95
 Pro Gly Arg Gly Gln Gly His Ile Gln Val Gly Leu Ala Ser Ser Thr
 100 105 110
 Thr Phe Trp Pro Gln Gln Arg Met Gly Phe His Gln Ser Leu Ser Thr
 115 120 125
 Ser Arg Phe Pro Lys Glu Ser Pro Arg Ser
 130 135

<210> 5841
 <211> 3411
 <212> DNA
 <213> Homo sapiens

<400> 5841
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180
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<210> 5842

<211> 460

<212> PRT

<213> Homo sapiens

<400> 5842

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			20					25					30		
Thr	Leu	Trp	Gly	His	Glu	Asn	Pro	Phe	Ser	Asp	Leu	Pro	Ser	Gly	Thr
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Leu	Asn	Phe	His	Pro	Val	Trp	Thr	Ser	Arg	Thr	Cys	Ser	Arg	Pro	Pro
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Phe	Cys	Leu	Ser	Gln	Ile	Val	Gln	Leu	Lys	Ala	Ile	Asn	Val	Asp	Leu
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Gln	Ser	Asp	Ala	Ala	Leu	Gln	Val	Asp	Ile	Ser	Asp	Ala	Leu	Ser	Glu
				85					90					95	
Arg	Asp	Lys	Val	Lys	Phe	Thr	Val	His	Thr	Lys	Ser	Ser	Leu	Pro	Asn
			100					105					110		
Phe	Lys	Gln	Asn	Glu	Phe	Ser	Val	Val	Arg	Gln	His	Glu	Glu	Phe	Ile
	115						120					125			
Trp	Leu	His	Asp	Ser	Phe	Val	Glu	Asn	Glu	Asp	Tyr	Ala	Gly	Tyr	Ile
	130					135				140					
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2160
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2220

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 2280
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 2340
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<210> 5846

<211> 257

<212> PRT

<213> Homo sapiens

<400> 5846

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Val	Met	Glu	Glu	Leu	Gln	Arg	His	His	Glu	Arg	Glu	Leu	Gln	Arg	Leu
			20					25					30		
Gln	Gln	Glu	Lys	Glu	Trp	Leu	Leu	Ala	Glu	Glu	Thr	Ala	Ala	Thr	Ala
			35				40					45			
Ser	Ala	Ile	Glu	Ala	Met	Lys	Lys	Ala	Tyr	Gln	Glu	Glu	Leu	Ser	Arg
	50					55				60					
Glu	Leu	Ser	Lys	Thr	Arg	Ser	Leu	Gln	Gln	Gly	Pro	Asp	Gly	Leu	Arg
65					70				75					80	
Lys	Gln	His	Gln	Ser	Asp	Val	Glu	Ala	Leu	Lys	Arg	Glu	Leu	Gln	Val
			85					90						95	
Leu	Ser	Glu	Gln	Tyr	Ser	Gln	Lys	Cys	Leu	Glu	Ile	Gly	Ala	Leu	Met
			100					105					110		
Arg	Gln	Ala	Glu	Glu	Arg	Glu	His	Thr	Leu	Arg	Arg	Cys	Gln	Gln	Glu
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Gly	Gln	Glu	Leu	Leu	Arg	His	Asn	Gln	Glu	Leu	His	Gly	Arg	Leu	Ser
		130				135					140				
Glu	Glu	Ile	Asp	Gln	Leu	Arg	Gly	Phe	Ile	Ala	Ser	Gln	Gly	Met	Gly
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			165					170						175	
Leu	Leu	Arg	Val	Lys	Glu	Asn	Glu	Leu	Gln	Tyr	Leu	Lys	Lys	Glu	Val
			180					185					190		
Gln	Cys	Leu	Arg	Asp	Glu	Leu	Gln	Met	Met	Gln	Lys	Asp	Lys	Arg	Phe
		195					200					205			
Thr	Ser	Gly	Lys	Tyr	Gln	Asp	Val	Tyr	Val	Glu	Leu	Ser	His	Ile	Lys

210		215		220
Thr Arg Ser Glu Arg	Glu Ile Glu Gln Leu Lys	Glu His Leu Arg Leu		
225	230	235	240	
Ala Met Ala Ala Leu	Gln Glu Lys Glu Ser Met	Arg Asn Ser Leu Ala		
245	250	255		

Glu

<210> 5847
 <211> 1021
 <212> DNA
 <213> Homo sapiens

<400> 5847
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 120
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 180
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 240
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 300
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 360
 tagacccttt ccctccagag tcacgcacat actcgatcgc gcatcacttg ggagaatggt
 420
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 480
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 1021

<210> 5848
 <211> 120
 <212> PRT

<213> Homo sapiens

<400> 5848

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 Asn Met Ala Asn Leu Phe Ile Arg Lys Met Val Asn Pro Leu Leu Tyr
 20 25 30
 Leu Ser Arg His Thr Val Lys Pro Arg Ala Leu Ser Thr Phe Leu Phe
 35 40 45
 Gly Ser Ile Arg Gly Ala Ala Pro Val Ala Val Glu Pro Gly Ala Ala
 50 55 60
 Val Arg Ser Leu Leu Ser Pro Gly Leu Leu Pro His Leu Leu Pro Ala
 65 70 75 80
 Leu Gly Phe Lys Asn Lys Thr Val Leu Lys Lys Arg Cys Lys Asp Cys
 85 90 95
 Tyr Leu Val Lys Arg Arg Gly Arg Trp Tyr Val Tyr Cys Lys Thr His
 100 105 110
 Pro Arg His Lys Gln Arg Gln Met
 115 120

<210> 5849

<211> 3174

<212> DNA

<213> Homo sapiens

<400> 5849

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 120
 aaaaatctca agaccacagg acagcgtgag cccaccccc ctcccccaat gaccccagca
 180
 tgcggtaatg ccaggcgggt ggccccctggg catgcggggg ggagtgatgc atggaaggaa
 240
 aagccaccgg ccatggaaat tagtacagaa cccccccaca cacactcaga cacaggatac
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 420
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 540
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 600
 gggggaaaag ggagaggcca cagggcaaag agtgtattag ggctgagct gcagctgcct
 660
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 720
 gcatctggaa ggggctagag gcctgctgag atcctcctct ccctctggcc tcctctcgga
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 840

gccaaaawyy mmttggtttt ttaaaaaata atcacaattt gtgggttaa aaccaatttg
900
caaccaggca tgagccacaa tcagaaccac cccagcggga gagcggagt ccagacaggg
960
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<210> 5850

<211> 154

<212> PRT

<213> Homo sapiens

<400> 5850

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His	Ser	Val	Pro	Ala	Tyr	Pro	Trp	Asp	Trp	Gly	His	Leu	Ile	Arg	Phe
			20					25					30		
Cys	Thr	Gln	Thr	Gly	His	Ala	Gln	Pro	Cys	Pro	Ser	Ala	Pro	Ser	Thr
		35					40						45		
Gly	Pro	Ile	His	Ile	Ala	Glu	Gly	Gly	Arg	Gly	Arg	Pro	Pro	Pro	Gly
	50					55					60				
Ser	Ala	Ser	Asn	Pro	Gln	Pro	Pro	Gly	Ser	Pro	His	Cys	Pro	Ser	Ala
65					70					75				80	
Gly	Leu	Ser	Pro	Val	Pro	Gly	Val	Gly	Gly	Arg	Gln	Cys	Pro	Gly	Thr
				85					90					95	
Val	Pro	Arg	Val	Arg	Arg	Pro	Gly	Leu	Ala	Gly	His	Pro	Val	Thr	His
			100					105					110		
Arg	Ile	Asn	Arg	Lys	Thr	Ala	Ser	Pro	Pro	Asn	Leu	Cys	Pro	Arg	His
		115					120					125			
Asn	Met	Ser	Arg	Ser	Glu	Ser	Cys	Thr	Pro	Arg	Ser	Arg	Ala	Pro	Leu
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Gln	Arg	Thr	Leu	Thr	Pro	Pro	Arg	Gly	Ala						
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<210> 5851

<211> 488

<212> DNA

<213> Homo sapiens

<400> 5851

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120
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180
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240
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300
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360
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488

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<210> 5852

<211> 82

<212> PRT

<213> Homo sapiens

<400> 5852

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Met Trp Lys Gly Leu Val Lys Arg Asn Ala Ser Val Glu Thr Val Asp
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Asn Lys Thr Ser Glu Asp Val Thr Met Ala Ala Ala Ser Pro Val Thr
20           25           30
Leu Thr Lys Gly Thr Ser Ala Ala His Leu Asn Ser Met Glu Val Thr
35           40           45
Thr Glu Asp Thr Ser Arg Thr Asp Ala Tyr Glu Ser Tyr Lys Lys Lys
50           55           60
Asp Tyr Thr Gln Val Asp Tyr Leu Ile Asn Gly Met Tyr Ala Asp Ser
65           70           75           80
Glu Met

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<210> 5853

<211> 487

<212> DNA

<213> Homo sapiens

<400> 5853

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120
tcaggcccag cagctccatg gaggacgccg gcgaggaccc caccacgttt gctgcccact
180

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ctctgcccag tgacccccgt ctcttgGCCA ctgtgaccaa cgcatacctg ggcacacgag
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 360
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 ctttccg
 487

<210> 5854
 <211> 68
 <212> PRT
 <213> Homo sapiens

<400> 5854
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 Tyr Arg Arg Ser Gln Glu Gly Gly Pro Ala Arg Pro Ala Ala Pro Asp
 20 25 30
 Thr Pro Ser Gly Arg Ser Gly Pro Ala Ala Pro Trp Arg Thr Pro Ala
 35 40 45
 Arg Thr Pro Pro Arg Leu Leu Pro Thr Leu Cys Pro Val Thr Pro Val
 50 55 60
 Ser Trp Pro Leu
 65

<210> 5855
 <211> 362
 <212> DNA
 <213> Homo sapiens

<400> 5855
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 tccctccgac cctcccgag gcacctgctg ggggctgtgg ggcccaaagc gggagggagt
 180
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 240
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 300
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 360
 an
 362

<210> 5856
 <211> 113
 <212> PRT

<213> Homo sapiens

<400> 5856

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Val Thr Ala Pro Leu Cys Ser Ala Asp Pro Leu Leu Ala Val Pro Pro
      20           25           30
Ser Pro Pro Asp Pro Pro Ala Gly Thr Cys Trp Gly Leu Trp Gly Pro
      35           40           45
Lys Arg Glu Gly Val Asn Glu Val Val Ala Glu Val Leu Leu Ala Ala
      50           55           60
His Glu Gly Val Gly Asp Gln Gly Glu Ala Gly Ala His Pro Val Leu
65           70           75           80
Ser Asp Ala Gly Leu Leu Val Leu Gly Leu Arg Ala Ala Leu Gly Glu
      85           90           95
His Gln Ala His Leu Gly Ser Ala Leu Asn Glu His Gln Arg Val Leu
      100          105          110
Ala

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<210> 5857

<211> 1751

<212> DNA

<213> Homo sapiens

<400> 5857

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120
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180
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720
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780
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840

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 960
 gaccaaaaag aaataatatc ttatgatgta aaagatgcta ttgggataag tttattaaag
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<210> 5858

<211> 434

<212> PRT

<213> Homo sapiens

<400> 5858

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			20					25					30		
Gly	Gly	Gln	Gly	Arg	Gly	Gly	Glu	Lys	Pro	Pro	His	Leu	Ala	Ala	Leu
		35					40					45			
Ile	Leu	Ala	Arg	Gly	Gly	Ser	Lys	Gly	Ile	Pro	Leu	Lys	Asn	Ile	Lys
	50					55				60					
His	Leu	Ala	Gly	Val	Pro	Leu	Ile	Gly	Trp	Val	Leu	Arg	Ala	Ala	Leu
65					70				75					80	
Asp	Ser	Gly	Ala	Phe	Gln	Ser	Val	Trp	Val	Ser	Thr	Asp	His	Asp	Glu
			85					90					95		
Ile	Glu	Asn	Val	Ala	Lys	Gln	Phe	Gly	Ala	Gln	Val	His	Arg	Arg	Ser
		100						105					110		
Ser	Glu	Val	Ser	Lys	Asp	Ser	Ser	Thr	Ser	Leu	Asp	Ala	Ile	Ile	Glu

115 120 125
 Phe Leu Asn Tyr His Asn Glu Val Asp Ile Val Gly Asn Ile Gln Ala
 130 135 140
 Thr Ser Pro Cys Leu His Pro Thr Asp Leu Gln Lys Val Ala Glu Met
 145 150 155 160
 Ile Arg Glu Glu Gly Tyr Asp Ser Val Phe Ser Val Val Arg Arg His
 165 170 175
 Gln Phe Arg Trp Ser Glu Ile Gln Lys Gly Val Arg Glu Val Thr Glu
 180 185 190
 Pro Leu Asn Leu Asn Pro Ala Lys Arg Pro Arg Arg Gln Asp Trp Asp
 195 200 205
 Gly Glu Leu Tyr Glu Asn Gly Ser Phe Tyr Phe Ala Lys Arg His Leu
 210 215 220
 Ile Glu Met Gly Tyr Leu Gln Gly Gly Lys Met Ala Tyr Tyr Glu Met
 225 230 235 240
 Arg Ala Glu His Ser Val Asp Ile Asp Val Asp Ile Asp Trp Pro Ile
 245 250 255
 Ala Glu Gln Arg Val Leu Arg Tyr Gly Tyr Phe Gly Lys Glu Lys Leu
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 Val Lys Asp Ala Ile Gly Ile Ser Leu Leu Lys Lys Ser Gly Ile Glu
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 Val Val Asp Glu Trp Arg Lys Glu Met Gly Leu Cys Trp Lys Glu Val
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 Ala Tyr Leu Gly Asn Glu Val Ser Asp Glu Glu Cys Leu Lys Arg Val
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 Gly Leu Ser Gly Ala Pro Ala Asp Ala Cys Ser Thr Ala Gln Lys Ala
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<210> 5859

<211> 2267

<212> DNA

<213> Homo sapiens

<400> 5859

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<210> 5860

<211> 96

<212> PRT

<213> Homo sapiens

<400> 5860

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				20				25					30		
Ser	Arg	Ala	Ser	Glu	Ala	Ser	Gly	Ser	Leu	Leu	Leu	Arg	Phe	Phe	Leu
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Gln	Met	Gly	Leu	Gly	Arg	Cys	Arg	Phe	Cys	Phe	Ser	Pro	Trp	Leu	Pro
				50		55				60					
Val	Arg	Pro	Gln	Pro	Ser	Gly	Cys	Asp	Ile	Ile	Glu	Ser	Ala	Val	Ser
65				70					75					80	
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<210> 5861

<211> 1951

<212> DNA

<213> Homo sapiens

<400> 5861

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<210> 5862

<211> 514

<212> PRT

<213> Homo sapiens

<400> 5862

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          20           25           30
Pro Asp Leu Lys Val Ile Tyr Ile Leu Val Arg Pro Lys Ala Gly Gln
          35           40           45
Thr Leu Gln Gln Arg Val Phe Gln Ile Leu Asp Ser Lys Leu Phe Glu
          50           55           60
Lys Val Lys Glu Val Cys Pro Asn Val His Glu Lys Ile Arg Ala Ile
65           70           75           80
Tyr Ala Asp Leu Asn Gln Asn Asp Phe Ala Ile Ser Lys Glu Asp Met
          85           90           95
Gln Glu Leu Leu Ser Cys Thr Asn Ile Ile Phe His Cys Ala Ala Thr
          100          105          110
Val Arg Phe Asp Asp Thr Leu Arg His Ala Val Gln Leu Asn Val Thr
          115          120          125
Ala Thr Arg Gln Leu Leu Leu Met Ala Ser Gln Met Pro Lys Leu Glu
          130          135          140
Ala Phe Ile His Ile Ser Thr Ala Tyr Ser Asn Cys Asn Leu Lys His
145          150          155          160
Ile Asp Glu Val Ile Tyr Pro Cys Pro Val Glu Pro Lys Lys Lys Ile
          165          170          175
Ile Asp Ser Leu Glu Trp Leu Asp Asp Ala Ile Ile Asp Glu Ile Thr
          180          185          190
Pro Lys Leu Ile Arg Asp Trp Pro Asn Ile Tyr Thr Tyr Thr Lys Ala
          195          200          205
Leu Gly Glu Met Val Val Gln Gln Glu Ser Arg Asn Leu Asn Ile Ala
          210          215          220
Ile Ile Arg Pro Ser Ile Val Gly Ala Thr Trp Gln Glu Pro Phe Pro
225          230          235          240
Gly Trp Val Asp Asn Ile Asn Gly Pro Asn Gly Ile Ile Ile Ala Thr
          245          250          255
Gly Lys Gly Phe Leu Arg Ala Ile Lys Ala Thr Pro Met Ala Val Ala
          260          265          270
Asp Val Ile Pro Val Asp Thr Val Val Asn Leu Met Leu Ala Val Gly
          275          280          285
Trp Tyr Thr Ala Val His Arg Pro Lys Ser Thr Leu Val Tyr His Ile
          290          295          300
Thr Ser Gly Asn Met Asn Pro Cys Asn Trp His Lys Met Gly Val Gln
305          310          315          320
Val Leu Ala Thr Phe Glu Lys Ile Pro Phe Glu Arg Pro Phe Arg Arg
          325          330          335
Pro Asn Ala Asn Phe Thr Ser Asn Ser Phe Thr Ser Gln Tyr Trp Asn
          340          345          350
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385              390              395              400
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      405              410              415
Gln Arg Val Phe Asn Phe Asp Val Arg Gln Leu Asn Trp Leu Glu Tyr
      420              425              430
Ile Glu Asn Tyr Val Leu Gly Val Lys Lys Tyr Leu Leu Lys Glu Asp
      435              440              445
Met Ala Gly Ile Pro Lys Ala Lys Gln Arg Leu Lys Arg Leu Arg Asn
      450              455              460
Ile His Tyr Leu Phe Asn Thr Ala Leu Phe Leu Ile Ala Trp Arg Leu
465              470              475              480
Leu Ile Ala Arg Ser Gln Met Ala Arg Asn Val Trp Phe Phe Ile Val
      485              490              495
Ser Phe Cys Tyr Lys Phe Leu Ser Tyr Phe Arg Ala Ser Ser Thr Leu
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Lys Val

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<210> 5863
 <211> 438
 <212> DNA
 <213> Homo sapiens

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<210> 5864
 <211> 104
 <212> PRT
 <213> Homo sapiens

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<400> 5864
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Asp Cys Ser Leu Pro Val Gly Gln Thr His Ser Asn Thr Lys Leu Phe
      20              25              30
Cys Gln Tyr Leu Ser Tyr Val Pro Phe Met Ala Glu Tyr Gln Ser Lys

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<210> 5866

<211> 212

<212> PRT

<213> Homo sapiens

<400> 5866

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			20					25					30		
Arg	Ala	Gly	Arg	Thr	Ala	Arg	Ala	Asn	Asn	Pro	Gly	Ile	Val	Leu	Thr
		35					40					45			
Phe	Val	Leu	Pro	Thr	Glu	Gln	Phe	His	Leu	Gly	Lys	Ile	Glu	Glu	Leu
	50					55					60				
Leu	Val	Glu	Arg	Thr	Gly	Ala	Pro	Phe	Cys	Ser	Pro	Thr	Ser	Ser	Gly
65					70				75					80	
Trp	Arg	Arg	Ser	Arg	Ala	Ser	Ala	Ile	Ala	Ala	Gly	Val	His	Pro	Gln
			85					90					95		
Asp	Ala	Met	Arg	Ser	Val	Thr	Lys	Gln	Ala	Ile	Arg	Glu	Ala	Arg	Leu
		100						105					110		
Lys	Glu	Ile	Lys	Glu	Glu	Leu	Leu	His	Ser	Glu	Lys	Leu	Lys	Thr	Tyr
	115					120						125			
Phe	Glu	Asp	Asn	Pro	Arg	Asp	Leu	Gln	Leu	Leu	Arg	His	Asp	Leu	Pro
	130					135					140				
Leu	His	Pro	Ala	Val	Val	Lys	Pro	His	Leu	Gly	His	Val	Pro	Asp	Tyr
145				150						155				160	
Leu	Val	Pro	Pro	Ala	Leu	Arg	Gly	Leu	Val	Arg	Pro	His	Lys	Lys	Arg
			165					170					175		
Lys	Lys	Leu	Ser	Ser	Ser	Cys	Arg	Lys	Ala	Lys	Arg	Ala	Lys	Ser	Gln
		180						185					190		
Asn	Pro	Leu	Arg	Ser	Phe	Lys	His	Lys	Gly	Lys	Lys	Phe	Arg	Pro	Thr
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<210> 5867

<211> 1882

<212> DNA

<213> Homo sapiens

<400> 5867

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<210> 5868
<211> 131
<212> PRT
<213> Homo sapiens

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35 40 45
Ile Pro Tyr Val Thr Tyr Asp Glu Asp Tyr Glu Gln Leu Val Glu Asp
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Ile Val Arg Asp Gly Arg Leu Tyr Ala Ser Glu Asn His Gln Glu Ile
65 70 75 80
Leu Lys Asp Lys Lys Leu Ile Lys Ala Phe Phe Glu Val Leu Ala His
85 90 95
Pro Gln Asn Tyr Phe Lys Tyr Thr Glu Lys His Lys Glu Met Leu Pro
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<210> 5869
<211> 910
<212> DNA
<213> Homo sapiens

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<210> 5870
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 5870
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 35 40 45
 Pro Thr Leu Val Gln Thr Gly Leu His Gly Arg His Ile Leu Gly Arg
 50 55 60
 His Val Phe Gly Ser Ala Asn Leu Phe Ser Cys Ala Ile Asp Gln
 65 70 75 80
 Val Phe Pro Asn Glu Gly Cys Leu Pro Tyr Ser Cys Gln Glu Pro Asn
 85 90 95
 Ser Ser Leu Gln Tyr Gln Ile Gln Ser Val Val Arg Met Lys Cys Gly
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 Gly Leu Val Thr Glu Glu Ala Val Glu Arg Arg Arg Ala Trp Val Ala
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<210> 5871
 <211> 2217
 <212> DNA
 <213> Homo sapiens

<400> 5871
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<213> Homo sapiens

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<211> 1648

<212> PRT

<213> Homo sapiens

<400> 5876

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Arg	Asn	Cys	Ala	Ala	Ser	Gly	Ser	Asp	Pro	Thr	Asp	Leu	Asn	Ser	Pro
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Leu	Leu	Asp	Ser	Gly	Leu	Pro	Ser	Leu	Leu	Val	Arg	Ser	Leu	Ala	Ser
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Phe	Cys	Phe	Ser	His	Ile	Ser	Ser	Ser	Glu	Ser	Ile	Ala	Gln	Ser	Ile
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Tyr Ala Glu Val Leu	Leu Lys Glu Arg Lys	His Ala Gln Cys Leu Leu
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Gln Ser Pro Ser Ala	Asn Val Leu Pro Thr	Leu Pro Phe His Val Leu
995	1000	1005
Arg Ser Leu Phe Ser	Thr Thr Pro Leu Thr	Thr Asp Asp Gly Val Leu
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Leu Arg Arg Met Ala	Leu Glu Ile Gly Ala	Leu His Leu Ile Leu Val
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Cys Leu Ser Ala Leu	Ser His His Ser Pro	Arg Val Pro Asn Ser Ser
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Thr Glu Glu Gln Gln	Leu Tyr Trp Ala Lys	Gly Thr Gly Phe Gly Thr
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Arg Leu Glu Glu Glu	His Val Thr Cys Leu	Leu Gln Val Leu Ala Ser
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Tyr Ile Asn Pro Val	Ser Ser Ala Val Asn	Gly Glu Ala Gln Ser Ser
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Arg Asn Asp Ser Val	Leu Asp Met Ala Arg	His Val Pro Leu Tyr Arg
1170	1175	1180
Ala Leu Leu Glu Leu	Leu Arg Ala Ile Ala	Ser Cys Ala Ala Met Val
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Pro Leu Leu Leu Pro	Leu Ser Thr Glu Asn	Gly Glu Glu Glu Glu
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Gln Ser Glu Cys Gln	Thr Ser Val Gly Thr	Leu Leu Ala Lys Met Lys
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Val Lys Thr Gly Val	Lys Pro Asp Ala Ser	Asp Gln Glu Pro Glu Gly
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Leu Thr Leu Leu Val	Pro Asp Ile Gln Lys	Thr Ala Glu Ile Val Tyr
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Ala Ala Thr Thr Ser	Leu Arg Arg Ala Asn	Gln Glu Lys Lys Leu Gly
1285	1290	1295
Glu Tyr Ser Lys Lys	Ala Ala Met Lys Pro	Lys Pro Leu Ser Val Leu
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Lys Ser Leu Glu Glu	Lys Tyr Val Ala Val	Met Lys Lys Leu Gln Phe
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Asp Thr Phe Glu Met	Val Ser Glu Asp Glu	Asp Gly Lys Leu Gly Phe
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Lys Val Asn Tyr His	Tyr Met Ser Gln Val	Lys Asn Ala Asn Asp Ala
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Asp Glu Glu Arg Leu Asp Ile Met Lys Val Leu Ile Thr Gly Pro Ala					
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Asp Thr Pro Tyr Ala Asn Gly Cys Phe Glu Phe Asp Val Tyr Phe Pro					
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Gln Asp Tyr Pro Ser Ser Pro Pro Leu Val Asn Leu Glu Thr Thr Gly					
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Gly His Ser Val Arg Phe Asn Pro Asn Leu Tyr Asn Asp Gly Lys Val					
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Cys Leu Ser Ile Leu Asn Thr Trp His Gly Arg Pro Glu Glu Lys Trp					
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Asn Pro Gln Thr Ser Ser Phe Leu Gln Val Leu Val Ser Val Gln Ser					
	1475		1480		1485
Leu Ile Leu Val Ala Glu Pro Tyr Phe Asn Glu Pro Gly Tyr Glu Arg					
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Ser Arg Gly Thr Pro Ser Gly Thr Gln Ser Ser Arg Glu Tyr Asp Gly					
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Asn Ile Arg Gln Ala Thr Val Lys Trp Ala Met Leu Glu Gln Ile Arg					
	1525		1530		1535
Asn Pro Ser Pro Cys Phe Lys Glu Val Ile His Lys His Phe Tyr Leu					
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Lys Arg Val Glu Ile Met Ala Gln Cys Glu Glu Trp Ile Ala Asp Ile					
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Gln Gln Tyr Ser Ser Asp Lys Arg Val Gly Arg Thr Met Ser His His					
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Ala Ala Ala Leu Lys Arg His Thr Ala Gln Leu Arg Glu Glu Leu Leu					
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Lys Leu Pro Cys Pro Glu Gly Leu Asp Pro Asp Thr Asp Asp Ala Pro					
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Glu Val Cys Arg Ala Thr Thr Gly Ala Glu Glu Thr Leu Met His Asp					
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<211> 683

<212> DNA

<213> Homo sapiens

<400> 5877

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<210> 5878

<211> 227

<212> PRT

<213> Homo sapiens

<400> 5878

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<211> 1555

<212> DNA

<213> Homo sapiens

<400> 5879

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<210> 5880
 <211> 185
 <212> PRT
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<400> 5880
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 Phe Tyr Asp Val Glu Ala Leu Arg Asp Tyr Leu Leu Gln Arg Glu Met
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 Tyr Lys Val His Glu Lys Asn Arg Ser Tyr Thr Trp Leu Glu Lys Gln
 65 70 75 80
 His Gly Pro Tyr Gly Ala Gly Ala Phe Phe Ile Leu Lys Gln Gly Gly
 85 90 95
 Ala Val Lys Phe Arg Asp Lys Glu Trp Ile Arg Pro Asp Lys Tyr Gly
 100 105 110
 His Phe Ser Gln Glu Phe Trp Asn Phe Cys Glu Val Pro Val Glu Ala
 115 120 125
 Val Asp Ala Gly Asp Cys Asp Ile Asn Tyr Glu Gly Leu Asp Asn Leu
 130 135 140
 Arg Thr Ser Ala Gly Trp Thr Ser Arg Thr Ser Leu Pro Cys Pro Thr
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<210> 5881
 <211> 327
 <212> DNA
 <213> Homo sapiens

<400> 5881
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 180
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<210> 5882
 <211> 109
 <212> PRT

<213> Homo sapiens

<400> 5882

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Lys	Arg	Ala	Ser	Val	Asp	Val	Asp	Leu	Leu	Ala	Pro	Arg	Ser	Pro	Met
		20						25				30			
Ala	Lys	Glu	Asn	Met	Val	Thr	Phe	Ser	His	Thr	Leu	Pro	Arg	Ala	Ser
	35						40					45			
Ala	Pro	Ser	Leu	Asp	Asp	Pro	Ala	Arg	Arg	His	Met	Thr	Ile	His	Val
	50					55					60				
Pro	Leu	Asp	Ala	Ser	Arg	Ser	Lys	Gln	Leu	Ile	Ser	Glu	Trp	Lys	Gln
65					70					75				80	
Lys	Ser	Leu	Glu	Gly	Arg	Gly	Leu	Gly	Leu	Pro	Asp	Asp	Ala	Ser	Pro
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Gly	His	Leu	Arg	Ala	Pro	Ala	Glu	Pro	Met	Pro	Glu	Xaa			
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<210> 5883

<211> 579

<212> DNA

<213> Homo sapiens

<400> 5883

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<210> 5884

<211> 71

<212> PRT

<213> Homo sapiens

<400> 5884

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240
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<210> 5886

<211> 265

<212> PRT

<213> Homo sapiens

<400> 5886

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			20					25					30		
Gly	Ala	Gly	Pro	Leu	Tyr	Ser	His	His	Leu	Pro	Thr	Ser	Pro	Leu	Gln
			35				40					45			
Lys	Ala	Leu	Leu	Ala	Ala	Gly	Ser	Ala	Ala	Met	Ala	Leu	Tyr	Asn	Pro
			50			55					60				
Tyr	Arg	His	Asp	Met	Val	Ala	Val	Leu	Gly	Glu	Thr	Thr	Gly	His	Arg
65					70				75					80	
Thr	Leu	Lys	Val	Leu	Arg	Asp	Gln	Met	Arg	Arg	Asp	Pro	Glu	Gly	Ala
			85					90					95		
Gln	Ile	Leu	Gln	Glu	Arg	Pro	Arg	Ile	Ser	Thr	Ser	Thr	Leu	Asp	Leu
			100					105					110		
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			115				120					125			
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			130			135					140				
Arg	Phe	Val	Asp	Asp	Glu	Glu	Leu	Ala	Tyr	Val	Ile	Gln	Arg	Tyr	Arg
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				165				170					175		
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Pro Met Cys Ile Leu Gly Ala Phe Phe Gly Pro Ile Arg Leu Gly Ala					
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Gln Ser Leu Gln Val Leu Val Ser Glu Leu Ile Pro Trp Ala Val Gln					
	210		215		220
Asn Gly Arg Arg Ala Pro Cys Val Leu Asn Leu Tyr Tyr Glu Arg Arg					
225		230		235	240
Trp Glu Gln Ser Leu Arg Ala Leu Arg Glu Glu Leu Gly Ile Thr Ala					
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<210> 5887

<211> 3779

<212> DNA

<213> Homo sapiens

<400> 5887

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<210> 5888

<211> 166

<212> PRT

<213> Homo sapiens

<400> 5888

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Pro	Glu	Tyr	Met	Trp	Phe	Leu	Leu	Tyr	Cys	Glu	Gly	Thr	Arg	Phe	Thr
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Leu	Asn	Phe	Arg	Gly	Asn	Lys	Asn	Pro	Ser	Leu	Leu	Gly	Ile	Leu	Tyr				
			100					105					110						
Gly	Lys	Lys	Tyr	Glu	Ala	Asp	Met	Cys	Val	Arg	Arg	Phe	Pro	Leu	Glu				
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Tyr	Gln	Glu	Lys	Asp	Ala	Leu	Gln	Glu	Val	Lys	Thr	Leu	Asp	Gly	Met				
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<210> 5889

<211> 2198

<212> DNA

<213> Homo sapiens

<400> 5889

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<210> 5890

<211> 118

<212> PRT

<213> Homo sapiens

<400> 5890

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			20					25					30		
Glu	Cys	Ser	Gly	Thr	Ile	Thr	Ala	His	Cys	Ser	Leu	Asp	Phe	Pro	Gly
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Glu	Glu	Arg	Gln	Gln	His	Gly	Glu	Cys	Pro	Val	Pro	Thr	Pro	Trp	Lys

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Ala	Leu	Gly	Cys	Pro	Thr	Leu	Gly	Ala	Thr	Ala	Arg	Arg	Gly	Arg	Ser
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<210> 5891

<211> 1459

<212> DNA

<213> Homo sapiens

<400> 5891

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<210> 5892

<211> 212

<212> PRT

<213> Homo sapiens

<400> 5892

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		20						25					30		
Phe	Arg	Asn	Gly	Ala	Val	Tyr	Gly	Ala	Lys	Ile	Arg	Ala	Pro	His	Ala
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Leu	Val	Met	Thr	Phe	Leu	Phe	Arg	Asn	Gly	Ser	Leu	Gln	Glu	Lys	Leu
	50				55					60					
Trp	Ala	Ile	Leu	Gln	Ala	Thr	Tyr	Ile	His	Ser	Trp	Asn	Leu	Ala	Arg
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Phe	Val	Phe	Thr	Tyr	Lys	Gly	Leu	Arg	Ala	Leu	Gln	Ser	Tyr	Ile	Gln
			85					90						95	
Gly	Lys	Thr	Tyr	Pro	Ala	His	Ala	Phe	Leu	Ala	Ala	Phe	Leu	Gly	Gly
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Ile	Leu	Val	Phe	Gly	Glu	Asn	Asn	Asn	Ile	Asn	Ser	Gln	Ile	Asn	Met
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Tyr	Leu	Leu	Ser	Arg	Val	Leu	Phe	Ala	Leu	Ser	Arg	Leu	Ala	Val	Glu
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Lys	Gly	Tyr	Ile	Pro	Glu	Pro	Arg	Trp	Asp	Pro	Phe	Pro	Leu	Leu	Thr
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Ser	Asn	Val	Trp	His	Asp	Ile	Ser	Asp	Phe	Leu	Val	Tyr	Asn	Lys	Ser
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<210> 5893

<211> 1389

<212> DNA

<213> Homo sapiens

<400> 5893

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<210> 5894

<211> 260

<212> PRT

<213> Homo sapiens

<400> 5894

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      50           55           60
Tyr Cys Ser Thr Arg Ile Tyr Ala Ser Met Lys Cys Pro Asp Gln Lys
      65           70           75           80
Cys Leu Tyr Thr Cys Gln Ile Lys Asp Gly Gly Val Gln Pro Gln Phe
      85           90           95
Glu Ile Val Pro Glu Asp Asp Pro Gln Asn Ala Ile Val Ser Ser Ser
      100          105          110
Ala Asp Ala Cys His Ala Glu Leu Leu Arg Thr Ile Ser Thr Thr Met
      115          120          125
Gly Lys Leu Met Pro Asn Leu Leu Pro Ala Gly Ala Asp Phe Phe Gly
      130          135          140
Phe Ser His Pro Ala Ile His Asn Leu Ile Gln Ser Cys Pro Gly Ala
      145          150          155          160
Arg Lys Cys Ile Asn Tyr Gln Trp Val Lys Phe Asp Val Cys Lys Pro
      165          170          175
Gly Asp Gly Gln Leu Pro Glu Gly Leu Pro Glu Asn Asp Ala Ala Met
      180          185          190
Ser Phe Glu Ala Phe Gln Arg Gln Ile Phe Asp Glu Asp Gln Asn Asp
      195          200          205
Pro Leu Leu Pro Gly Ser Leu Asp Leu Pro Glu Leu Gln Pro Ala Ala
      210          215          220
Phe Val Ser Ser Tyr Gln Pro Met Tyr Leu Thr His Glu Pro Leu Val
      225          230          235          240
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Gln Ser Ser Asp
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<210> 5895

<211> 2748

<212> DNA

<213> Homo sapiens

<400> 5895

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420

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<210> 5896

<211> 261

<212> PRT

<213> Homo sapiens

<400> 5896

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			20					25					30		
Arg	Asp	Leu	Gly	Gly	Ser	Ser	Ala	Ala	Thr	Glu	Ala	Val	Ala	Ile	Leu
		35					40					45			
Thr	Ala	Thr	Tyr	Pro	Val	Gly	His	Met	Pro	Tyr	Gly	Trp	Leu	Thr	Glu
	50					55					60				
Ile	Arg	Ala	Val	Tyr	Pro	Ala	Phe	Asp	Lys	Asn	Asn	Pro	Ser	Asn	Lys
65					70				75					80	
Leu	Val	Ser	Thr	Ser	Asn	Thr	Val	Thr	Ala	Ala	His	Ile	Lys	Lys	Phe
			85					90					95		
Thr	Phe	Val	Cys	Met	Ala	Leu	Ser	Leu	Thr	Leu	Cys	Phe	Val	Met	Phe
		100						105					110		
Trp	Thr	Pro	Asn	Val	Ser	Glu	Lys	Ile	Leu	Ile	Asp	Ile	Ile	Gly	Val
	115					120					125				
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	130				135					140					
Phe	Phe	Pro	Val	Pro	Val	Thr	Val	Arg	Ala	His	Leu	Thr	Gly	Trp	Leu
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Met	Thr	Leu	Lys	Lys	Thr	Phe	Val	Leu	Ala	Pro	Ser	Ser	Val	Leu	Arg
			165					170					175		
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Glu Ser Thr Met Val Ala Ile Ala Ala Cys Tyr Val Tyr Arg Lys Gln					
	210		215		220
Lys Lys Lys Met Glu Asn Glu Ser Ala Thr Glu Gly Glu Asp Ser Ala					
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<210> 5897

<211> 1930

<212> DNA

<213> Homo sapiens

<400> 5897

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<210> 5898

<211> 242

<212> PRT

<213> Homo sapiens

<400> 5898

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			20					25					30		
Glu	Ile	Cys	Ala	Asp	Glu	Phe	Pro	Gly	Ser	Ser	Ala	Thr	Tyr	Arg	Ile
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Thr	Ala	Ile	Glu	Leu	Val	Gln	Thr	Asn	Ser	Glu	Tyr	Asp	Pro	Ser	Arg
				85					90					95	
Cys	Phe	Ala	Phe	Val	His	Asp	Leu	Cys	Asp	Glu	Glu	Lys	Ser	Tyr	Pro
			100					105					110		
Val	Pro	Lys	Gly	Ser	Leu	Asp	Ile	Ile	Ile	Leu	Ile	Phe	Val	Leu	Ser
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Ala	Ile	Val	Pro	Asp	Lys	Met	Gln	Lys	Ala	Ile	Asn	Arg	Leu	Ser	Arg

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Phe Tyr Val Arg Gly Asp Gly Thr Arg Val Tyr Phe Phe Thr Gln Glu		175
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	195	200
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<210> 5899

<211> 1589

<212> DNA

<213> Homo sapiens

<400> 5899

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<212> DNA

<213> Homo sapiens

<400> 5901

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<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 5904

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<211> 215

<212> PRT

<213> Homo sapiens

<400> 5906

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85	90	95
Ser Thr Arg Val Glu	Phe Asp Leu Pro Glu Tyr	Ser Val Arg Arg Arg
100	105	110
Tyr Gln Asp Phe Asp	Trp Leu Arg Ser Lys Leu	Glu Glu Ser Gln Pro
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Thr His Leu Ile Pro	Pro Leu Pro Glu Lys Phe	Val Val Lys Gly Val
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Val Asp Arg Phe Ser	Glu Glu Phe Val Glu Thr	Arg Arg Lys Ala Leu
145	150	155
Asp Lys Phe Leu Lys	Arg Ile Thr Asp His	Pro Val Leu Ser Phe Asn
165	170	175
Glu His Phe Asn Ile	Phe Leu Thr Ala Lys	Asp Leu Asn Ala Tyr Lys
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<210> 5913

<211> 2495

<212> DNA

<213> Homo sapiens

<400> 5913

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<210> 5914

<211> 158

<212> PRT

<213> Homo sapiens

<400> 5914

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Arg	Ser	Phe	Ser	Ile	Leu	Arg	Leu	Trp	Phe	Ser	Ile	Leu	Phe	Leu	Thr
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Gly	Gln	Gly	Phe	Asp	Arg	His	Leu	Phe	Ala	Leu	Arg	His	Leu	Ala	Ala
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Ala	Xaa	Gly	Ile	Ile	Leu	Pro	Glu	Leu	Tyr	Leu	Asp	Pro	Ala	Tyr	Gly
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Gln	Ile	Asn	His	Asn	Val	Leu	Ser	Thr	Ser	Thr	Leu	Ser	Ser	Pro	Ala
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Val	Asn	Xaa	Cys	Arg	Phe	Ala	Pro	Val	Val	Ser	Asp	Ala	Phe	Gly	Val
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Gly	Tyr	Ala	Val	His	Asp	Asn	Trp	Ile	Gly	Cys	Asn	Val	Ser	Ser	Tyr
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Pro	Gly	Arg	Asn	Ala	Arg	Glu	Phe	Leu	Gln	Cys	Val	Glu	Lys	Ala	Xaa
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<211> 457

<212> DNA

<213> Homo sapiens

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<210> 5916

<211> 152

<212> PRT

<213> Homo sapiens

<400> 5916

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Tyr Val Asn Phe Val Asn Glu Val Phe His Gln Ala Phe Leu Leu Pro
          35           40           45
Ser Cys Glu Ile Ala Val Thr Arg Lys Val Val Gln Val Tyr Arg Lys
          50           55           60
Trp Ile Leu Gln Asp Lys Pro Val Phe Met Glu Glu Pro Asp Arg Lys
65           70           75           80
Asp Val Ala Gln Glu Asp Ala Glu Lys Leu Gly Phe Ser Glu Thr Asp
          85           90           95
Ser Lys Glu Ala Ser Ser Glu Ser Ser Gly His Lys Arg Ser Ser Ser
          100          105          110
Trp Gly Arg Thr Tyr Ser Phe Thr Ser Ala Met Ser Arg Gly Cys Val
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Thr Glu Glu Glu Asn Thr Asn Val Lys Ala Gly Val Gln Ala Leu Leu
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<210> 5917

<211> 3727

<212> DNA

<213> Homo sapiens

<400> 5917

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<211> 981

<212> PRT

<213> Homo sapiens

<400> 5918

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Ser Glu Ser Pro Arg Pro Asn Pro Pro His Ala Ala Arg His Arg Glu
          35           40           45
Pro Gly Pro Val Arg Arg Pro Met Arg Lys Ser Phe Ser Gln Pro Gly
          50           55           60
Leu Arg Ser Leu Ala Phe Arg Lys Glu Leu Gln Asp Gly Gly Leu Arg
65           70           75           80
Ser Ser Gly Phe Phe Ser Ser Phe Glu Glu Ser Asp Ile Glu Asn His
          85           90           95
Leu Ile Ser Gly His Asn Ile Val Gln Pro Thr Asp Ile Glu Glu Asn
          100          105          110
Arg Thr Met Leu Phe Thr Ile Gly Gln Ser Glu Val Tyr Leu Ile Ser
          115          120          125
Pro Asp Thr Lys Lys Ile Ala Leu Glu Lys Asn Phe Lys Glu Ile Ser
          130          135          140
Phe Cys Ser Gln Gly Ile Arg His Val Asp His Phe Gly Phe Ile Cys
145          150          155          160
Arg Glu Ser Ser Gly Gly Gly Phe His Phe Val Cys Tyr Val Phe
          165          170          175
Gln Cys Thr Asn Glu Ala Leu Val Asp Glu Ile Met Met Thr Leu Lys
          180          185          190
Gln Ala Phe Thr Val Ala Ala Val Gln Gln Thr Ala Lys Ala Pro Ala
          195          200          205
Gln Leu Cys Glu Gly Cys Pro Leu Gln Ser Leu His Lys Leu Cys Glu
          210          215          220
Arg Ile Glu Gly Met Asn Ser Ser Lys Thr Lys Leu Glu Leu Gln Lys
225          230          235          240
His Leu Thr Thr Leu Thr Asn Gln Glu Gln Ala Thr Ile Phe Glu Glu
          245          250          255
Val Gln Lys Leu Arg Pro Arg Asn Glu Gln Arg Glu Asn Glu Leu Ile
          260          265          270
Ile Ser Phe Leu Arg Cys Leu Tyr Glu Glu Lys Gln Lys Glu His Ile
          275          280          285
His Ile Gly Glu Met Lys Gln Thr Ser Gln Met Ala Ala Glu Asn Ile
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Gly Ser Glu Leu Pro Pro Ser Ala Thr Arg Phe Arg Leu Asp Met Leu
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Lys Asn Lys Ala Lys Arg Ser Leu Thr Glu Ser Leu Glu Ser Ile Leu
          325          330          335
Ser Arg Gly Asn Lys Ala Arg Gly Leu Gln Glu His Ser Ile Ser Val
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Asp Leu Asp Ser Ser Leu Ser Ser Thr Leu Ser Asn Thr Ser Lys Glu
          355          360          365
Pro Ser Val Cys Glu Lys Glu Ala Leu Pro Ile Ser Glu Ser Ser Phe
          370          375          380
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Pro Phe Gly Pro His Gln Arg Lys Arg Lys Gly His Leu Val Ser Ser
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545          550          555          560
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Lys Ile Lys Phe Asp Met Glu Lys Met His Ser Ala Val Gly Gln Gly
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Phe His Leu Lys His Gln Phe Pro Ser Lys Gln Gln Pro Lys Asp Val
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Pro Tyr Lys Glu Leu Leu Lys Gln Leu Thr Ser Gln Gln His Ala Ile
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Leu Ile Asp Leu Gly Arg Thr Phe Pro Thr His Pro Tyr Phe Ser Ala
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Ser Leu Leu Asp Gln Glu Val Gly Tyr Cys Gln Gly Leu Ser Phe Val
705          710          715          720
Ala Gly Ile Leu Leu Leu His Met Ser Glu Glu Glu Ala Phe Lys Met
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Leu Lys Phe Leu Met Phe Asp Met Gly Leu Arg Lys Gln Tyr Arg Pro
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785          790          795          800
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Tyr	Glu	Val	Glu	Tyr	His	Val	Leu	Gln	Glu	Glu	Leu	Ile	Asp	Ser	Ser	
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Pro	Leu	Ser	Asp	Asn	Gln	Arg	Met	Asp	Lys	Leu	Glu	Lys	Thr	Asn	Ser	
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<212> DNA
<213> Homo sapiens
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780

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<211> 93

<212> PRT

<213> Homo sapiens

<400> 5920

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<211> 1252

<212> PRT

<213> Homo sapiens

<400> 5922

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Lys	Ser	Val	Ile	Ile	Trp	Thr	Ser	Lys	Leu	Glu	Gly	Ile	Leu	Lys	Tyr
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Gln	Leu	Ala	Ser	Cys	Ser	Ser	Ser	Asp	Phe	Gly	Leu	Trp	Ser	Pro	Glu
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Gln	Lys	Ser	Val	Ser	Lys	His	Lys	Ser	Ser	Ser	Lys	Ile	Ile	Cys	Cys
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Ser	Trp	Thr	Asn	Asp	Gly	Gln	Tyr	Leu	Ala	Leu	Gly	Met	Phe	Asn	Gly
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Ile	Ile	Ser	Ile	Arg	Asn	Lys	Asn	Gly	Glu	Glu	Lys	Val	Lys	Ile	Glu
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Arg	Pro	Gly	Gly	Ser	Leu	Ser	Pro	Ile	Trp	Ser	Ile	Cys	Trp	Asn	Pro
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Ser	Ser	Arg	Trp	Glu	Ser	Phe	Trp	Met	Asn	Arg	Glu	Asn	Glu	Asp	Ala
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Glu	Asp	Val	Ile	Val	Asn	Arg	Tyr	Ile	Gln	Glu	Ile	Pro	Ser	Thr	Leu
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Phe Tyr Gln Leu Ile Phe Ser Thr Val His Gly Leu Tyr Lys Asp Arg				
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Ser Gly Gly Gly Tyr Leu Asn Ile Lys Ala Ser Thr Phe Pro Val His				
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Met Glu Ala Leu Glu Gly Leu Asp Phe Glu Thr Ala Lys Lys Ala Phe				
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<210> 5923

<211> 1989

<212> DNA

<213> Homo sapiens

<400> 5923

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<211> 146

<212> PRT

<213> Homo sapiens

<400> 5924

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<211> 4538

<212> DNA

<213> Homo sapiens

<400> 5925

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<210> 5926

<211> 526

<212> PRT

<213> Homo sapiens

<400> 5926

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<211> 1786
<212> DNA
<213> Homo sapiens
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<210> 5928

<211> 202

<212> PRT

<213> Homo sapiens

<400> 5928

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Phe	Leu	Met	Glu	Asn	Arg	Val	Gln	Ser	Phe	Tyr	Gln	Gln	Glu	Leu	Glu
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<211> 606

<212> DNA

<213> Homo sapiens

<400> 5929

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 35 40 45
 Leu Gln Pro Ala Gly Ser Val Ser Ser Thr Pro Leu Ser Thr Pro Cys
 50 55 60
 Ser Ser Val Pro Ser Ser Pro Ser Phe Ser Pro Thr Glu Gln Lys Thr
 65 70 75 80
 His Leu Glu Asp Leu Tyr Trp Met Ala Ser Asn Tyr Gln Gln Met Asn
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<210> 5931
 <211> 478
 <212> DNA
 <213> Homo sapiens

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<400> 5932

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 35 40 45
 Ala Gly Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln
 50 55 60
 Glu Val Met Glu Glu Glu Trp Asn Ala Leu Gln Ser Val Glu Asn Cys
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<210> 5933

<211> 1953

<212> DNA

<213> Homo sapiens

<400> 5933

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<211> 314

<212> PRT

<213> Homo sapiens

<400> 5934

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 Arg Glu Cys Val Ile Cys Met Met Asp Phe Val Tyr Gly Asp Pro Ile
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 Arg Phe Leu Pro Cys Met His Ile Tyr His Leu Asp Cys Ile Asp Asp
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 <212> DNA
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<211> 406

<212> PRT

<213> Homo sapiens

<400> 5938

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Gly Lys Ser Leu Ile Val Pro Phe Lys Gly Ser Arg Val Ile Asp Ser
      35           40           45
Thr Val Leu Pro Gly Ile Leu Ile Glu Met Ser Glu Val Gln Leu Met
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Arg Leu Leu Pro Ile Lys Lys Ser Thr Ala Leu Lys Val Ala Leu Phe
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Cys Thr Thr Leu Ser Gly Asp Thr Ser Asp Thr Gly Glu Gly Thr Val
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Val Val Ser Tyr Gly Val Ser Leu Glu Asn Ala Val Leu Asp Gln Leu
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Cys Gln Lys Val Ile His Pro Ser Leu Lys Gln Phe Leu Asn Met His
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Arg Ile Ile Ala Ile Asp Arg Ile Gly Val Thr Leu Met Glu Pro Leu
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Thr Lys Met Thr Gly Thr Gln Pro Ile Gly Ser Leu Gly Ser Ile Cys
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Pro Asn Ser Tyr Gly Ser Val Lys Asp Val Cys Thr Ala Lys Phe Gly
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Ser Lys His Phe Phe His Leu Ile Pro Asn Glu Ala Thr Ile Cys Ser
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Glu Cys Thr Gln Thr Glu Leu Gln Leu Ile Ala Glu Ala Phe Cys Ser
      275          280          285
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Pro Cys Val Ala Asn Trp Pro Asp Leu Leu Ser Gln Cys Gly Cys Gly
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Arg Arg Pro Phe Val Pro Gln Ser Cys Leu Pro His Glu Ala Val Gly
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Ser Ala Ser Asn Leu Thr Leu Asp Cys Leu Thr Ala Lys Leu Ser Gly
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<212> DNA

<213> Homo sapiens

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20      25      30
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Ile Ser Gln Gln Leu Gly Leu Glu Leu Asn Thr Val Ser Asn Phe Phe
50      55      60
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<212> DNA

<213> Homo sapiens

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<210> 5942

<211> 89

<212> PRT

<213> Homo sapiens

<400> 5942

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	50						55					60							
Ala	Thr	Phe	Cys	Ile	Phe	Ser	Arg	Asp	Arg	Val	Ser	Pro	Cys	Trp	Pro				
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<210> 5943
 <211> 781
 <212> DNA
 <213> Homo sapiens

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 780
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 781

<210> 5944
 <211> 174
 <212> PRT
 <213> Homo sapiens

<400> 5944
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<210> 5945
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<212> DNA
<213> Homo sapiens
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420
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<210> 5946
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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Arg Ile Arg Arg Gly His Ala Arg Leu Ala Leu Ser Gln Asn Gln Gln
 50 55 60
 Ser Ser Gly Ala Ala Gly Pro Thr Gly Lys Asn Gly Glu Lys Ile Gln
 65 70 75 80
 Val Leu Thr Asp Lys Ile Asp Val Leu Leu Gln Gln Ile Glu Glu Leu
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 Gly Ser Glu Gly Lys Val Glu Glu Ala Gln Gly Met Met Lys Leu Val
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 Glu Gln Leu Lys Glu Glu Arg Glu Leu
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<210> 5947
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 <213> Homo sapiens

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<210> 5948
 <211> 76
 <212> PRT
 <213> Homo sapiens

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 Pro Arg Ala Ser Lys His His Tyr Ser Arg Ser Arg Ser Arg Ser Arg
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<210> 5949
 <211> 4706
 <212> DNA
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<210> 5950

<211> 397

<212> PRT

<213> Homo sapiens

<400> 5950

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Ser	Tyr	Asp	Glu	Asp	Val	Met	Gly	Gln	Leu	Val	Cys	His	Glu	Leu	Ile
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	245	250
Asn Ala Glu Ile Asp Leu Glu Asp Leu Lys Lys His Thr Val Tyr Tyr		255
	260	265
Gly Gly Phe His Gly Ser His Arg Val Ile Ile Trp Leu Trp Asp Ile		270
	275	280
Leu Ala Ser Asp Phe Thr Pro Asp Glu Arg Ala Met Phe Leu Lys Phe		285
	290	295
Val Thr Ser Cys Ser Arg Pro Pro Leu Leu Gly Phe Ala Tyr Leu Lys		300
305	310	315
Pro Pro Phe Ser Ile Arg Cys Val Glu Val Ser Asp Asp Gln Asp Thr		320
	325	330
Gly Asp Thr Leu Gly Ser Val Leu Arg Gly Phe Phe Thr Ile Arg Lys		335
	340	345
Arg Glu Pro Gly Gly Arg Leu Pro Thr Ser Ser Thr Cys Phe Asn Leu		350
	355	360
Leu Lys Leu Pro Asn Tyr Ser Lys Lys Ser Val Leu Arg Glu Lys Leu		365
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Arg Tyr Ala Ile Ser Met Asn Thr Gly Phe Glu Leu Ser		380
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<210> 5951

<211> 1724

<212> DNA

<213> Homo sapiens

<400> 5951

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720

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 960
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 1380
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 1620
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<210> 5952

<211> 378

<212> PRT

<213> Homo sapiens

<400> 5952

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Gly	Arg	Pro	Ala	Leu	Arg	Leu	Gly	Ser	Ser	Leu	Ala	Gly	Leu	Gly	Gly
		20					25					30			
Ala	Pro	Arg	Phe	Pro	Pro	Gly	Gly	Phe	Ala	Ala	Gly	Arg	Thr	Met	Leu
	35					40					45				
Leu	Lys	Glu	Tyr	Arg	Ile	Cys	Met	Pro	Leu	Thr	Val	Asp	Glu	Tyr	Lys
	50				55				60						
Ile	Gly	Gln	Leu	Tyr	Met	Ile	Ser	Lys	His	Ser	His	Glu	Gln	Ser	Asp
65			70					75					80		
Arg	Gly	Glu	Gly	Val	Glu	Val	Val	Gln	Asn	Glu	Pro	Phe	Glu	Asp	Pro
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<210> 5953

<211> 777

<212> DNA

<213> Homo sapiens

<400> 5953

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180
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240
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360

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 480
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 540
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 660
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<210> 5954

<211> 152

<212> PRT

<213> Homo sapiens

<400> 5954

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Tyr	Lys	Leu	Val	Gly	Ser	Pro	Pro	Trp	Lys	Glu	Ala	Phe	Arg	Gln	Arg
			20					25					30		
Cys	Leu	Glu	Arg	Met	Arg	Asn	Ser	Arg	Asp	Arg	Leu	Leu	Asn	Arg	Tyr
		35					40					45			
Arg	Gln	Leu	Xaa	Ser	Ser	Gly	Pro	Gly	Asn	Ser	Gln	Asn	Ser	Phe	Leu
		50				55					60				
Val	Gln	Glu	Val	Met	Glu	Glu	Glu	Trp	Asn	Ala	Leu	Gln	Ser	Val	Glu
65					70				75					80	
Asn	Cys	Pro	Glu	Asp	Leu	Ala	Gln	Leu	Glu	Glu	Leu	Ile	Asp	Met	Ala
				85				90				95			
Val	Leu	Glu	Glu	Ile	Gln	Gln	Glu	Leu	Ile	Asn	Gln	Glu	Gln	Ser	Ile
			100				105					110			
Ile	Ser	Glu	Tyr	Glu	Lys	Ser	Leu	Gln	Phe	Asp	Glu	Lys	Cys	Leu	Ser
		115					120					125			
Ile	Met	Leu	Ala	Glu	Trp	Glu	Ala	Asn	Pro	Leu	Ile	Cys	Pro	Val	Cys
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<210> 5955

<211> 1459

<212> DNA

<213> Homo sapiens

<400> 5955

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 240
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 300
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 360
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 420
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 480
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 660
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 720
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 1459

<210> 5956

<211> 431

<212> PRT

<213> Homo sapiens

<400> 5956

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Arg	Phe	Lys	Ala	Leu	Pro	Pro	Gly	Ala	Gln	Pro	Val	Ile	Cys	Ile	His						
		35					40					45									
Ser	Ala	Cys	Thr	Trp	Ala	Asp	Asp	Leu	Ser	Val	Cys	Tyr	Pro	Ser	Pro						
	50					55					60										
His	Ile	Thr	Ile	His	Met	His	Gly	Gly	Thr	Ser	Ser	Asp	Gly	Ser	Ser						
65					70					75					80						
Ser	Met	Ala	Ala	Ile	Tyr	Gly	Gly	Val	Glu	Gly	Gly	Gly	Thr	Arg	Ser						
				85				90						95							
Glu	Val	Leu	Leu	Val	Ser	Glu	Asp	Gly	Lys	Ile	Leu	Ala	Glu	Ala	Asp						
			100					105					110								
Gly	Leu	Ser	Thr	Asn	His	Trp	Leu	Ile	Gly	Thr	Asp	Lys	Cys	Val	Glu						
		115					120					125									
Arg	Ile	Asn	Glu	Met	Val	Asn	Arg	Ala	Lys	Arg	Lys	Ala	Gly	Val	Asp						
	130					135					140										
Pro	Leu	Val	Pro	Leu	Arg	Ser	Leu	Gly	Leu	Ser	Leu	Ser	Gly	Gly	Asp						
145					150					155					160						
Gln	Glu	Asp	Ala	Gly	Arg	Ile	Leu	Ile	Glu	Glu	Leu	Arg	Asp	Arg	Phe						
			165					170						175							
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			180					185					190								
Ile	Ala	Thr	Ala	Thr	Pro	Asp	Gly	Gly	Val	Val	Leu	Ile	Ser	Gly	Thr						
		195					200					205									
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	210					215					220										
Gly	Gly	Trp	Gly	His	Met	Met	Gly	Asp	Glu	Gly	Ser	Ala	Leu	Ser	Ala						
225					230				235						240						
Pro	Ser	Ala	Tyr	Trp	Ile	Ala	His	Gln	Ala	Val	Lys	Ile	Val	Phe	Asp						
			245					250						255							
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			260					265					270								
Gln	Ala	Met	Phe	His	Tyr	Phe	Gln	Val	Pro	Asp	Arg	Leu	Gly	Ile	Leu						
		275					280					285									
Thr	His	Leu	Tyr	Arg	Asp	Phe	Asp	Lys	Cys	Arg	Phe	Ala	Gly	Phe	Cys						
	290					295					300										
Arg	Lys	Ile	Ala	Glu	Gly	Ala	Gln	Gln	Gly	Asp	Pro	Leu	Ser	Arg	Tyr						
305					310					315					320						
Ile	Phe	Arg	Lys	Ala	Gly	Glu	Met	Leu	Gly	Arg	His	Ile	Val	Ala	Val						
			325					330						335							
Leu	Pro	Glu	Ile	Asp	Pro	Val	Leu	Phe	Gln	Gly	Lys	Ile	Gly	Leu	Pro						
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<210> 5957

<211> 855

<212> DNA

<213> Homo sapiens

<400> 5957

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120
ctaaacaggt accgccaggc tggaagcagt gggccaggga attctcagaa cagctttcta
180
gttcaagagg tgatggaaga agagtggaat gctttgcagt cagtggagaa ttgtccagaa
240
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300
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360
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420
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480
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600
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660
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720
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<210> 5958

<211> 106

<212> PRT

<213> Homo sapiens

<400> 5958

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Gly	Ser	Pro	Pro	Trp	Lys	Glu	Ala	Phe	Arg	Gln	Arg	Cys	Leu	Glu	Arg
			20					25				30			
Met	Arg	Asn	Ser	Arg	Asp	Arg	Leu	Leu	Asn	Arg	Tyr	Arg	Gln	Ala	Gly
		35					40				45				
Ser	Ser	Gly	Pro	Gly	Asn	Ser	Gln	Asn	Ser	Phe	Leu	Val	Gln	Glu	Val
	50				55					60					
Met	Glu	Glu	Glu	Trp	Asn	Ala	Leu	Gln	Ser	Val	Glu	Asn	Cys	Pro	Glu
65				70				75						80	
Asp	Leu	Ala	Gln	Leu	Glu	Glu	Leu	Ile	Asp	Met	Ala	Val	Leu	Glu	Glu
			85				90						95		
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100

105

<210> 5959
 <211> 830
 <212> DNA
 <213> Homo sapiens

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 480
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 540
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 660
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<210> 5960
 <211> 251
 <212> PRT
 <213> Homo sapiens

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 Glu Arg Glu Leu His Ser Val His Gly Tyr Pro Gly Thr Phe Ala Asn
 35 40 45
 Cys Met His Ile Leu Ser Glu Glu Thr Cys Phe Gln Arg Trp Val Thr
 50 55 60
 Gly Glu Arg Lys Phe Ala Leu Gln Lys Met Asp Ser Met Leu Ser Ser
 65 70 75 80
 Glu Ala Ala Trp Val Ser Gln Tyr Lys Asp Ile Thr Asp Val Asp Glu

85								90				95			
Met	Lys	Val	Pro	Asp	Cys	Ala	Glu	Thr	Phe	Met	Thr	Leu	Leu	Leu	Val
100								105				110			
Ile	Thr	Asp	Arg	Tyr	Lys	Asn	Leu	Pro	Thr	Ala	Ser	Arg	Lys	Leu	Gln
115								120				125			
Phe	Leu	Glu	Leu	Gln	Lys	Asp	Leu	Val	Asp	Asp	Phe	Arg	Ile	Arg	Leu
130								135				140			
Thr	Gln	Val	Met	Lys	Glu	Glu	Thr	Arg	Ala	Ser	Leu	Gly	Phe	Arg	Tyr
145								150				155			
Cys	Ala	Ile	Leu	Asn	Ala	Val	Asn	Tyr	Ile	Ser	Thr	Val	Leu	Ala	Asp
165								170				175			
Trp	Ala	Asp	Asn	Val	Phe	Phe	Leu	Gln	Leu	Gln	Gln	Ala	Ala	Leu	Glu
180								185				190			
Val	Phe	Ala	Glu	Asn	Asn	Thr	Leu	Ser	Lys	Leu	Gln	Leu	Gly	Gln	Leu
195								200				205			
Ala	Ser	Met	Glu	Ser	Ser	Val	Phe	Asp	Asp	Met	Ile	Asn	Leu	Leu	Glu
210								215				220			
Arg	Leu	Lys	His	Asp	Met	Leu	Thr	Arg	Gln	Val	Asp	His	Val	Phe	Arg
225								230				235			
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<210> 5961

<211> 585

<212> DNA

<213> Homo sapiens

<400> 5961

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<210> 5962

<211> 114

<212> PRT

<213> Homo sapiens

<400> 5962

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          20           25           30
Leu Ser His Ser His Gln Pro Gly Leu Ser Gly Glu Gly Ala Gln Glu
          35           40           45
Gln Ala Arg Ile Asp Thr Gly Ile His Met Lys Arg Met Gln Thr Pro
          50           55           60
Arg His Pro Ala Leu Ser Gln Ser Leu Ile Lys Phe Gly Ile Leu Phe
65           70           75           80
Asp Pro Ser Ile Phe Phe Leu Glu Thr Gly Ser Arg Phe Ile Ala Gln
          85           90           95
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<210> 5963

<211> 1288

<212> DNA

<213> Homo sapiens

<400> 5963

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420
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480
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<210> 5964

<211> 222

<212> PRT

<213> Homo sapiens

<400> 5964

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			20					25					30		
Gln	Ile	Arg	Asp	Ile	Gln	Arg	Glu	Glu	Glu	Lys	Val	Lys	Arg	Ser	Val
		35				40						45			
Lys	Asp	Ala	Ala	Lys	Lys	Gly	Gln	Lys	Asp	Val	Cys	Ile	Val	Leu	Ala
	50					55					60				
Lys	Glu	Met	Ile	Arg	Ser	Arg	Lys	Ala	Val	Ser	Lys	Leu	Tyr	Ala	Ser
65					70					75				80	
Lys	Ala	His	Met	Asn	Ser	Val	Leu	Met	Gly	Met	Lys	Asn	Gln	Leu	Ala
			85						90					95	
Val	Leu	Arg	Val	Ala	Gly	Ser	Leu	Gln	Lys	Ser	Thr	Glu	Val	Met	Lys
			100					105					110		
Ala	Met	Gln	Ser	Leu	Val	Lys	Ile	Pro	Glu	Ile	Gln	Ala	Thr	Met	Arg
	115						120					125			
Glu	Leu	Ser	Lys	Glu	Met	Met	Lys	Ala	Gly	Ile	Ile	Glu	Glu	Met	Leu
	130					135					140				
Glu	Asp	Thr	Phe	Glu	Ser	Met	Asp	Asp	Gln	Glu	Glu	Met	Glu	Glu	Glu
145					150					155				160	
Ala	Glu	Met	Glu	Ile	Asp	Arg	Ile	Leu	Phe	Glu	Ile	Thr	Ala	Gly	Ala
			165						170					175	
Leu	Gly	Lys	Ala	Pro	Ser	Lys	Val	Thr	Asp	Ala	Leu	Pro	Glu	Pro	Glu
			180					185					190		
Pro	Pro	Gly	Ala	Met	Ala	Ala	Ser	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Glu
		195					200					205			
Ala	Leu	Glu	Ala	Met	Gln	Ser	Arg	Leu	Ala	Thr	Leu	Arg	Ser		
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<210> 5965

<211> 1011

<212> DNA

<213> Homo sapiens

<400> 5965

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 120
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 180
 ggaagcagtg ggccagggaa ttctcagaac agctttctag ttcaagaggt gatggaagaa
 240
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 300
 gagctgatag acatggctgt gctggaggaa attcaacagg agctgatcaa ccaagagcag
 360
 tccatcatca gcgagtatga gaagagcttg cagtttgatg aaaagtgtct cagcatcatg
 420
 ctggctgagt gggaggcaaa cccactcatc tgtcctgtat gtacaaagta caacctgaga
 480
 atcacaagcg gtgtggtggt gtgtcagtgt ggccctgtcca tcccatctca ttcttctgag
 540
 ttgacagagc agaagcttcg tgccctgttta gagggtagta taaatgagca cagtgcacat
 600
 tgtccccaca cacctgaatt ttcagtcact ggaggaacag aagaaaagtc cagtcttctc
 660
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 720
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 780
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 840
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 900
 aactgccttg gaggagataa accaatttta tgtctatcat gttatacaaa aatctagaaa
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 1011

<210> 5966

<211> 233

<212> PRT

<213> Homo sapiens

<400> 5966

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			20					25					30		
Pro	Trp	Lys	Glu	Ala	Phe	Arg	Gln	Arg	Cys	Leu	Glu	Arg	Met	Arg	Asn
			35				40					45			
Ser	Arg	Asp	Arg	Leu	Leu	Asn	Arg	Tyr	Arg	Gln	Ala	Gly	Ser	Ser	Gly
			50			55					60				
Pro	Gly	Asn	Ser	Gln	Asn	Ser	Phe	Leu	Val	Gln	Glu	Val	Met	Glu	Glu
65					70					75				80	
Glu	Trp	Asn	Ala	Leu	Gln	Xaa	Gln	Trp	Xaa	Asn	Cys	Pro	Glu	Asp	Leu

85								90				95			
Ala	Gln	Leu	Glu	Glu	Leu	Ile	Asp	Met	Ala	Val	Leu	Glu	Glu	Ile	Gln
100								105				110			
Gln	Glu	Leu	Ile	Asn	Gln	Glu	Gln	Ser	Ile	Ile	Ser	Glu	Tyr	Glu	Lys
115								120				125			
Ser	Leu	Gln	Phe	Asp	Glu	Lys	Cys	Leu	Ser	Ile	Met	Leu	Ala	Glu	Trp
130								135				140			
Glu	Ala	Asn	Pro	Leu	Ile	Cys	Pro	Val	Cys	Thr	Lys	Tyr	Asn	Leu	Arg
145								150				155			
Ile	Thr	Ser	Gly	Val	Val	Val	Cys	Gln	Cys	Gly	Leu	Ser	Ile	Pro	Ser
165								170				175			
His	Ser	Ser	Glu	Leu	Thr	Glu	Gln	Lys	Leu	Arg	Ala	Cys	Leu	Glu	Gly
180								185				190			
Ser	Ile	Asn	Glu	His	Ser	Ala	His	Cys	Pro	His	Thr	Pro	Glu	Phe	Ser
195								200				205			
Val	Thr	Gly	Gly	Thr	Glu	Glu	Lys	Ser	Ser	Leu	Leu	Met	Ser	Cys	Leu
210								215				220			
Ala	Cys	Asp	Thr	Trp	Ala	Val	Ile	Leu							
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<210> 5967
<211> 1806
<212> DNA
<213> Homo sapiens
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120
tgtgcttttg ttgctaggca gtcaacagca gggctactaa agcacttcta atttagacaa
180
atcttttcct ctattttaga aatggatttc aatgggtgttc agtttgtttg cagaaacctt
240
ctgaaagtga gcatgttttt gaacacatta acaccgaagt tctacgtggc cctaacaggc
300
acttctcac taatatcagg gcttattttg atatttgaat ggtggtattt tcgcaaatac
360
ggaacttcat tcattgaaca agtctcagta agccacttgc gcccccttct gggaggggtt
420
gacaacaact cttccaacaa ttctaattcc agtaacgggg actcagattc caataggcaa
480
agtgtctcag aatgcaaagt atggcgaaat ccactaaatt tatttagggg tgctgaatac
540
aatcggtata cttgggtgac aggacgagag cctcttactt actatgacat gaatctctct
600
gccaagacc accagacatt ctttacttgt gactcggacc atctgcgtcc cgcagatgca
660
ataatgcaga aagcctggag agagagaaac cccaagcta ggatttctgc agctcatgaa
720
gccttgagaa taaatgagac gagacaccaa tgtcttggtg tacatcaaaa gaaggctagc
780
aatgtgtgcc agaagactcg ggaggaccag ggaagcaaag cccttctgga actacaagca
840

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tatgctgatg ttcaggcagt cttagcaaag tatgatgata taagcttacc aaagtcagca
 900
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 1020
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 1080
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 1140
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 1200
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 1380
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 1440
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 1500
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 1560
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 1620
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 1680
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 1806

<210> 5968

<211> 434

<212> PRT

<213> Homo sapiens

<400> 5968

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Ser	Met	Phe	Leu	Asn	Thr	Leu	Thr	Pro	Lys	Phe	Tyr	Val	Ala	Leu	Thr
			20					25					30		
Gly	Thr	Ser	Ser	Leu	Ile	Ser	Gly	Leu	Ile	Leu	Ile	Phe	Glu	Trp	Trp
			35				40					45			
Tyr	Phe	Arg	Lys	Tyr	Gly	Thr	Ser	Phe	Ile	Glu	Gln	Val	Ser	Val	Ser
	50					55				60					
His	Leu	Arg	Pro	Leu	Leu	Gly	Gly	Val	Asp	Asn	Asn	Ser	Ser	Asn	Asn
65					70				75					80	
Ser	Asn	Ser	Ser	Asn	Gly	Asp	Ser	Asp	Ser	Asn	Arg	Gln	Ser	Val	Ser
				85				90					95		
Glu	Cys	Lys	Val	Trp	Arg	Asn	Pro	Leu	Asn	Leu	Phe	Arg	Gly	Ala	Glu

100							105					110				
Tyr	Asn	Arg	Tyr	Thr	Trp	Val	Thr	Gly	Arg	Glu	Pro	Leu	Thr	Tyr	Tyr	
			115													
Asp	Met	Asn	Leu	Ser	Ala	Gln	Asp	His	Gln	Thr	Phe	Phe	Thr	Cys	Asp	
	130					135					140					
Ser	Asp	His	Leu	Arg	Pro	Ala	Asp	Ala	Ile	Met	Gln	Lys	Ala	Trp	Arg	
145					150					155					160	
Glu	Arg	Asn	Pro	Gln	Ala	Arg	Ile	Ser	Ala	Ala	His	Glu	Ala	Leu	Glu	
				165					170					175		
Ile	Asn	Glu	Thr	Arg	His	Gln	Cys	Leu	Gly	Val	His	Gln	Lys	Lys	Ala	
				180					185				190			
Ser	Asn	Val	Cys	Gln	Lys	Thr	Arg	Glu	Asp	Gln	Gly	Ser	Lys	Ala	Leu	
		195						200				205				
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	210					215					220					
Asp	Asp	Ile	Ser	Leu	Pro	Lys	Ser	Ala	Thr	Ile	Cys	Tyr	Thr	Ala	Ala	
225					230					235					240	
Leu	Leu	Lys	Ala	Arg	Ala	Val	Ser	Asp	Lys	Phe	Ser	Pro	Glu	Ala	Ala	
				245					250					255		
Ser	Arg	Arg	Gly	Leu	Ser	Thr	Ala	Glu	Met	Asn	Ala	Val	Glu	Ala	Ile	
			260					265					270			
His	Arg	Ala	Val	Glu	Phe	Asn	Pro	His	Val	Pro	Lys	Tyr	Leu	Leu	Glu	
		275						280				285				
Met	Lys	Ser	Leu	Ile	Leu	Pro	Pro	Glu	His	Ile	Leu	Lys	Arg	Gly	Asp	
	290					295					300					
Ser	Glu	Ala	Ile	Ala	Tyr	Ala	Phe	Phe	His	Leu	Ala	His	Trp	Lys	Arg	
305					310					315					320	
Val	Glu	Gly	Ala	Leu	Asn	Leu	Leu	His	Cys	Thr	Trp	Glu	Gly	Thr	Phe	
				325					330					335		
Arg	Met	Ile	Pro	Tyr	Pro	Leu	Glu	Lys	Gly	His	Leu	Phe	Tyr	Pro	Tyr	
			340					345					350			
Pro	Ile	Cys	Thr	Glu	Thr	Ala	Asp	Arg	Glu	Leu	Leu	Pro	Ser	Phe	His	
		355						360				365				
Glu	Val	Ser	Val	Tyr	Pro	Lys	Lys	Glu	Leu	Pro	Phe	Phe	Ile	Leu	Phe	
	370					375					380					
Thr	Ala	Gly	Leu	Cys	Ser	Phe	Thr	Ala	Met	Leu	Ala	Leu	Leu	Thr	His	
385					390					395					400	
Gln	Phe	Pro	Glu	Leu	Met	Gly	Val	Phe	Ala	Lys	Ala	Val	Ser	Val	Cys	
				405					410					415		
Leu	Glu	Gly	Gly	Leu	Gly	Glu	Trp	Met	Gly	Lys	Ala	Lys	Gly	Ile	Lys	
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<210> 5969

<211> 429

<212> DNA

<213> Homo sapiens

<400> 5969

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ctgggcggcg ggggaaggggt cccggatctg cagcctgggg tcttgccag ccaggccatg
120

attgagaaga tcctgagcga ggacccccgg tggcaagatg ccaacttcgt gctgggcagc
 180
 tacaagacgg agcagtgccc gaagccgcca cgcctgtgcc gccagggcta tgcgtgcccc
 240
 cactaccaca atagccggga caggcggcgc aacccccggc ggttccagta caggtccacg
 300
 ccctgccccca gcgtgaagca cggggatgag tggggggaac cctcacgctg cgatggcggc
 360
 gacggctgcc agtattgcca ctcccgacg gagcagcagt tccatcccgat gatctacaaa
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 429

<210> 5970

<211> 143

<212> PRT

<213> Homo sapiens

<400> 5970

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Gln	Asn	Gly	Gln	Leu	Gly	Gly	Gly	Glu	Gly	Val	Pro	Asp	Leu	Gln	Pro
			20					25					30		
Gly	Val	Leu	Ala	Ser	Gln	Ala	Met	Ile	Glu	Lys	Ile	Leu	Ser	Glu	Asp
		35					40					45			
Pro	Arg	Trp	Gln	Asp	Ala	Asn	Phe	Val	Leu	Gly	Ser	Tyr	Lys	Thr	Glu
	50					55					60				
Gln	Cys	Pro	Lys	Pro	Pro	Arg	Leu	Cys	Arg	Gln	Gly	Tyr	Ala	Cys	Pro
65					70				75					80	
His	Tyr	His	Asn	Ser	Arg	Asp	Arg	Arg	Arg	Asn	Pro	Arg	Arg	Phe	Gln
			85					90						95	
Tyr	Arg	Ser	Thr	Pro	Cys	Pro	Ser	Val	Lys	His	Gly	Asp	Glu	Trp	Gly
			100					105					110		
Glu	Pro	Ser	Arg	Cys	Asp	Gly	Gly	Asp	Gly	Cys	Gln	Tyr	Cys	His	Ser
		115				120						125			
Arg	Thr	Glu	Gln	Gln	Phe	His	Pro	Glu	Ile	Tyr	Lys	Ser	Thr	Lys	
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<210> 5971

<211> 565

<212> DNA

<213> Homo sapiens

<400> 5971

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 120
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 180
 tagatggtca tccccatttt agagatagct cccttttata tccccatttt acagggtgaag
 240
 gaattgaggc acagaagggt aggtcacttc tgcaagatga ccagctgaac caaaatttca
 300

gggcttcaaa caccaaagt gttcctttgt cttccgtttc ccacttgctt cccagaggct
 360
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 420
 cccaggactg tggccgtgga tgccagagcg aggatgtgaa tcctgttggg ttctgaagcc
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 565

<210> 5972

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5972

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Cys	Pro	Asn	Arg	Gln	His	Pro	Tyr	Phe	Ile	Asp	Gly	His	Pro	His	Phe
			20					25					30		
Arg	Asp	Ser	Ser	Leu	Leu	Tyr	Pro	His	Phe	Thr	Gly	Glu	Gly	Ile	Glu
		35				40					45				
Ala	Gln	Lys	Val	Arg	Ser	Leu	Leu	Gln	Asp	Asp	Gln	Leu	Asn	Gln	Asn
	50					55					60				
Phe	Arg	Ala	Ser	Asn	Thr	Lys	Cys	Val	Pro	Leu	Ser	Ser	Val	Ser	His
65				70					75					80	
Leu	Leu	Pro	Arg	Gly	Ser	Ala	Ser	Ser	Leu	Trp	Pro	Leu	Ser	Ile	Leu
			85					90						95	
Pro	Pro	Thr	Leu	Leu	Pro	Ala	Ser								
			100												

<210> 5973

<211> 797

<212> DNA

<213> Homo sapiens

<400> 5973

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 180
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 420
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 480

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 780
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 797

<210> 5974

<211> 107

<212> PRT

<213> Homo sapiens

<400> 5974

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Ser	Leu	Arg	Ile	Met	Asp	Ala	Arg	Ala	Gln	Leu	Leu	Leu	Arg	Val	Pro
			20				25						30		
His	Pro	Gly	Pro	Ser	Leu	Thr	Ser	Gly	Ala	Leu	Thr	His	Ile	Arg	Asp
		35				40					45				
Pro	His	Pro	Gly	Leu	Ser	Pro	Thr	Ser	Gly	Thr	Leu	Met	Pro	Gly	Arg
		50				55					60				
Arg	Arg	Gly	Gly	Pro	Ser	Phe	Gly	Thr	Pro	Ala	Leu	Arg	Arg	Arg	Lys
65					70				75					80	
Cys	His	Arg	Glu	Ala	Pro	Ala	Ser	Gly	Leu	Ser	Thr	Ala	Ala	Arg	Glu
			85					90						95	
Arg	Leu	Trp	Trp	Pro	Arg	Ala	Arg	Val	Cys	Arg					
			100					105							

<210> 5975

<211> 2175

<212> DNA

<213> Homo sapiens

<400> 5975

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 120
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 180
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 240
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 420

gtgatcaaaa acttcatcca gtatttccac aaaactgtct cagatttgat tgaccagaaa
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600
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660
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720
gagcagaggt ttgaatccta ttacaactac tgcaatctct tcaactacat tcttaatgcc
780
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1020
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tacttcagcc tggtcgggct tctcgcctg cactccctgt taggagatta ctaccaggcc
1140
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1200
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1260
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1320
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1380
ctggccattg ccctcacgat gtaccccatg cgtatcgatg agagcattca cctccagctg
1440
cgggagaaat atggggacaa gatgttgccg atgcagaaag gtgaccaca agtctatgaa
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1740
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<400> 5976

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Glu	Leu	Pro	Asn	Gln	Trp	Leu	Trp	Asp	Ile	Ile	Asp	Glu	Phe	Ile	Tyr
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Gln	Phe	Gln	Ser	Phe	Ser	Gln	Tyr	Arg	Cys	Lys	Thr	Ala	Lys	Lys	Ser
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Ser	Leu	Val	Gly	Leu	Leu	Arg	Leu	His	Ser	Leu	Leu	Gly	Asp	Tyr	Tyr
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	290				295					300					
Tyr	Ser	Arg	Val	Pro	Glu	Cys	Gln	Val	Thr	Thr	Tyr	Tyr	Tyr	Val	Gly
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<212> DNA
<213> Homo sapiens
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180
caagtatacc accatcacac agaaatttta ttttttattt tattttttat agagacaggg
240
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420
tcaaaaaaca cgttaaattt aagcagaata aggctggggt cggtgggtca tgctgtgat
480
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<211> 77

<212> PRT

<213> Homo sapiens

<400> 5978

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			20					25					30		
Gly	Arg	Gly	Gly	Gln	Ile	Ile	Xaa	Ala	Arg	Ser	Ser	Arg	Pro	Ala	Trp
			35				40					45			
Thr	Thr	Trp	Arg	Xaa	Val	Phe	Thr	Lys	Asn	Thr	Lys	Ile	Ser	Trp	Ala
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<210> 5979

<211> 1095

<212> DNA

<213> Homo sapiens

<400> 5979

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 720
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 960
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 <212> PRT
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<400> 5980
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 Ser Gly Gln Glu Asp Tyr Asp Arg Leu Arg Pro Leu Ser Tyr Gln Asn
 35 40 45
 Thr His Leu Val Leu Ile Cys Tyr Asp Val Met Asn Pro Thr Ser Tyr
 50 55 60
 Asp Asn Val Leu Ile Lys Trp Phe Pro Glu Val Thr His Phe Cys Arg
 65 70 75 80
 Gly Ile Pro Met Val Leu Ile Gly Cys Lys Thr Asp Leu Arg Lys Asp
 85 90 95
 Lys Glu Gln Leu Arg Lys Leu Arg Ala Ala Gln Leu Glu Pro Ile Thr
 100 105 110
 Tyr Met Gln Gly Leu Ser Ala Cys Glu Gln Ile Arg Ala Ala Leu Tyr
 115 120 125
 Leu Glu Cys Ser Ala Lys Phe Arg Glu Asn Val Glu Asp Val Phe Arg
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 145 150 155 160
 Lys Lys Arg Arg Leu Cys Leu Leu Leu
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<210> 5981
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 <212> DNA
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 360
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 420
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 480
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 540
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<210> 5982

<211> 98

<212> PRT

<213> Homo sapiens

<400> 5982

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		20					25					30			
Pro	Arg	Ala	Pro	Leu	Pro	Arg	Ser	Ser	Ala	Arg	Arg	Pro	Ser	Lys	Ala
		35				40					45				
Asn	Leu	His	Thr	Leu	Gly	Gln	Leu	Lys	Leu	Ser	Arg	Arg	Cys	Arg	Glu
50					55					60					
Pro	Arg	Leu	Gly	Arg	Ala	Gly	Gln	Gln	Arg	Leu	His	Pro	Arg	Thr	Arg
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<210> 5983

<211> 790

<212> DNA

<213> Homo sapiens

<400> 5983

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 120

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 240
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<210> 5984

<211> 186

<212> PRT

<213> Homo sapiens

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			20					25					30		
Glu	Val	Asn	Arg	Gln	Cys	Pro	Gly	Glu	Lys	Glu	Pro	Val	Ser	Asp	Leu
		35					40						45		
Gln	Leu	Gly	Leu	Asp	Ala	Val	Glu	Pro	Thr	Ala	Leu	His	Lys	Thr	Leu
	50					55					60				
Glu	Thr	Pro	Ala	His	Asp	Arg	Ala	Glu	Pro	Asn	Ser	Gln	Leu	Asp	Ser
65					70					75				80	
Thr	His	Ser	Gly	Arg	Gly	Thr	Met	Tyr	Ser	Ser	Trp	Val	Lys	Ser	Pro
			85						90					95	
Asp	Arg	Thr	Gly	Val	Asn	Phe	Ser	Val	Asn	Ser	Asn	Leu	Arg	Asp	Leu
			100					105					110		
Thr	Pro	Ser	His	Gln	Leu	Glu	Val	Gly	Gly	Gly	Phe	Arg	Ile	Ser	Glu
			115				120					125			
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Thr	Val	Asn	Asp	Asn	Leu	Ile	Asp	Gly	Asn	Cys	Thr	Pro	Gln	Asn	Pro
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180

185

<210> 5985

<211> 737

<212> DNA

<213> Homo sapiens

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<211> 165

<212> PRT

<213> Homo sapiens

<400> 5986

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 Val Lys Ile Gln Asp Thr Asn Val Thr Ser Glu Asp Lys Lys Phe His

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<212> DNA

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<400> 5989

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<212> DNA

<213> Homo sapiens

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<211> 757

<212> PRT

<213> Homo sapiens

<400> 6000

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420	425	430
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450	455	460
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Cys Tyr Val Gln Tyr Met	Ile Ala Ile Ile Asn	Asn Cys Gln Thr Phe
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Glu Ala His Arg Arg Val	Val Val Glu Tyr Leu	Arg Ala Val Met Gln
610	615	620
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Lys Met Val Arg Glu Ala	Glu Gln Arg Arg Phe	Leu Phe Arg Lys Leu
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Ala Ser Gly Phe Gly Glu	Asp Val Asp Gly Tyr	Cys Asp Thr Ile Val
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Ala Val Ala Glu Val Ile	Lys Leu Thr Asp Pro	Ser Leu Leu Tyr Leu
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<211> 263

<212> PRT

<213> Homo sapiens

<400> 6002

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<211> 3107

<212> DNA

<213> Homo sapiens

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<211> 140

<212> PRT

<213> Homo sapiens

<400> 6004

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<210> 6005

<211> 1735

<212> DNA

<213> Homo sapiens

<400> 6005

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<210> 6006

<211> 200

<212> PRT

<213> Homo sapiens

<400> 6006

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			165					170					175		
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<210> 6007

<211> 693

<212> DNA

<213> Homo sapiens

<400> 6007

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<210> 6008

<211> 214

<212> PRT

<213> Homo sapiens

<400> 6008

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		20						25				30			
Gly	Lys	Met	Val	Lys	Lys	Val	Cys	Pro	Cys	Asn	Gln	Leu	Cys	Arg	Thr
		35					40					45			
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65					70				75						80
Asp	Leu	His	Lys	Leu	Val	Asp	Asn	Trp	Ala	Arg	Asp	Ala	Met	Asn	Leu
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Ser	Gly	Arg	Arg	Gly	Ser	Lys	Gly	His	Met	Asn	Tyr	Glu	Gly	Pro	Gly
			100					105					110		
Met	Ala	Arg	Lys	Phe	Ser	Ala	Pro	Gly	Gln	Leu	Cys	Ile	Ser	Met	Thr
		115					120				125				
Ser	Asn	Leu	Gly	Gly	Ser	Ala	Pro	Ile	Ser	Ala	Ala	Ser	Ala	Thr	Ser
		130				135					140				
Leu	Gly	His	Phe	Thr	Lys	Ser	Met	Cys	Pro	Pro	Gln	Gln	Tyr	Gly	Phe
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			180					185					190				
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<210> 6009

<211> 1570

<212> DNA

<213> Homo sapiens

<400> 6009

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<211> 468

<212> PRT

<213> Homo sapiens

<400> 6010

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			20					25					30		
Asp	Thr	Val	Tyr	Asp	Val	Val	Val	Ser	Gly	Gly	Gly	Leu	Val	Gly	Ala
		35				40						45			
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Glu	Thr	Tyr	Ser	Asn	Arg	Val	Ser	Ser	Ile	Ser	Pro	Gly	Ser	Ala	Thr
				85					90					95	
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			100					105					110		
Arg	Ala	Phe	Arg	Arg	Met	Gln	Val	Trp	Asp	Ala	Cys	Ser	Glu	Ala	Leu
		115				120						125			
Ile	Met	Phe	Asp	Lys	Asp	Asn	Leu	Asp	Asp	Met	Gly	Tyr	Ile	Val	Glu
	130					135					140				
Asn	Asp	Val	Ile	Met	His	Ala	Leu	Thr	Lys	Gln	Leu	Glu	Ala	Val	Ser
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Asp	Arg	Val	Thr	Val	Leu	Tyr	Arg	Ser	Lys	Ala	Ile	Arg	Tyr	Thr	Trp
			165						170					175	
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		195					200					205			
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Phe	Val	Asp	Ala	Val	Asn	Ser	Ala	Phe	Trp	Ser	Asp	Ala	Asp	His	Thr
	290		295		300										
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Leu	Lys	Pro	Thr	Lys	Val	Ser	Ala	Arg	Gln	Leu	Pro	Pro	Ser	Val	Pro
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			340					345					350		
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	370					375					380				
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Lys	Asp	Leu	Gly	Ser	Val	Ser	His	Leu	Thr	Gly	Tyr	Glu	Thr	Glu	Arg
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Gln	Arg	His	Asn	Thr	Ala	Leu	Leu	Ala	Ala	Thr	Asp	Leu	Leu	Lys	Arg
			420					425					430		
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<210> 6011

<211> 1331

<212> DNA

<213> Homo sapiens

<400> 6011

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<210> 6012

<211> 219

<212> PRT

<213> Homo sapiens

<400> 6012

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			20					25					30		
Lys	Glu	Pro	Gly	Asp	Ser	Ala	Gln	Phe	Thr	Lys	Ala	Ile	Ala	Ile	Ile
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Thr	Thr	Asn	Val	Gly	Arg	Tyr	Pro	Val	Gly	Arg	Phe	Pro	Ser	Leu	His
			100					105					110		
Val	Val	Lys	Val	Leu	Leu	Asp	Cys	Gly	Ala	Asp	Pro	Asp	Ser	Arg	Asp
			115				120					125			
Phe	Asp	Asn	Asn	Thr	Pro	Leu	His	Ile	Ala	Ala	Gln	Asn	Asn	Cys	Pro
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	180		185		190
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<210> 6013

<211> 2204

<212> DNA

<213> Homo sapiens

<400> 6013

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<211> 182

<212> PRT

<213> Homo sapiens

<400> 6014

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			20					25					30		
Val	Lys	His	Ala	Lys	Val	Tyr	Thr	Cys	Thr	Ile	Cys	Ser	Arg	Ala	Tyr
		35					40				45				
Thr	Ser	Glu	Thr	Tyr	Leu	Met	Lys	His	Met	Arg	Lys	His	Asn	Pro	Pro
		50				55				60					
Asp	Leu	Gln	Gln	Gln	Val	Gln	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Val	Ala
65					70				75					80	
Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala
			85				90						95		
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<210> 6017

<211> 2091

<212> DNA

<213> Homo sapiens

<400> 6017

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<211> 537

<212> PRT

<213> Homo sapiens

<400> 6018

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<212> DNA

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<213> Homo sapiens

<400> 6020

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Tyr Lys Leu Ala Val Ala Thr Phe Ala Gly Ile Glu Asn Lys Phe Gly
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<212> DNA

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<213> Homo sapiens

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<211> 496

<212> PRT

<213> Homo sapiens

<400> 6026

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<212> DNA

<213> Homo sapiens

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<211> 5157

<212> DNA

<213> Homo sapiens

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				885						890					895				
Lys Lys Asp Leu Asp Ser Tyr Leu Lys Thr Arg Ser Pro Val Thr Phe																			
			900					905						910					
Leu Ser Asp Leu Arg Ser Asn Leu Gln Val Ser Asn Glu Pro Gly Asn																			
		915					920						925						
Arg Tyr Asn Leu Gln Leu Ile Asn Ala Leu Val Leu Tyr Val Gly Thr																			
		930				935						940							
Gln Ala Ile Ala His Ile His Asn Lys Gly Ser Thr Pro Ser Met Ser																			
945					950					955						960			
Thr Ile Thr His Ser Ala His Met Asp Ile Phe Gln Asn Leu Ala Val																			
				965						970					975				
Asp Leu Asp Thr Glu Gly Arg Tyr Leu Phe Leu Asn Ala Ile Ala Asn																			
			980					985						990					
Gln Leu Arg Tyr Pro Asn Ser His Thr His Tyr Phe Ser Cys Thr Met																			
		995					1000						1005						
Leu Tyr Leu Phe Ala Glu Ala Asn Thr Glu Ala Ile Gln Glu Gln Ile																			
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1090

1095

<210> 6035
 <211> 320
 <212> DNA
 <213> Homo sapiens

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<210> 6036
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 6036
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 Ser Asn Leu Phe Ser Cys Cys Gln Val Glu Pro His Ile Gln Gly Leu
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 Arg Gln Val Leu Gln Glu Pro Ser Arg Glu Pro Pro Gly Trp Leu Gly
 35 40 45
 Ala Trp Pro Arg Ser Gln Ser His Asn Ala His His Cys Pro Thr Met
 50 55 60
 Pro Phe Arg Met Glu Pro Leu Ile His Trp Ala His Ser His Gly Gln
 65 70 75 80
 Arg Asp Tyr Pro Trp Thr Met Ile Glu Thr Leu Pro Ile Pro Gln Thr
 85 90 95
 Gln Gln Gly Leu Cys Asp
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<210> 6037
 <211> 3910
 <212> DNA
 <213> Homo sapiens

<400> 6037
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<210> 6038

<211> 214

<212> PRT

<213> Homo sapiens

<400> 6038

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			20					25					30		
His	Gly	Gly	Thr	Cys	Ser	Arg	Gln	Glu	Leu	Gly	Val	Ser	Asp	Val	Leu
			35					40					45		
Gly	Tyr	Val	His	Pro	Asp	Leu	Leu	Lys	Asp	Phe	Cys	Met	Asn	Pro	Gln
			50					55					60		
Thr	Val	Leu	Leu	Leu	Arg	Val	Ile	Ala	Ala	Phe	Cys	Phe	Leu	Gly	Ile
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Leu	Cys	Ser	Leu	Ser	Ala	Phe	Leu	Leu	Asp	Val	Phe	Gly	Pro	Lys	His
				85					90					95	
Pro	Ala	Leu	Lys	Ile	Thr	Arg	Arg	Tyr	Ala	Phe	Ala	His	Ile	Leu	Thr
			100					105					110		
Val	Leu	Gln	Cys	Ala	Thr	Val	Ile	Gly	Phe	Ser	Tyr	Trp	Ala	Ser	Glu
			115					120					125		
Leu	Ile	Leu	Ala	Gln	Gln	Gln	Gln	His	Lys	Lys	Tyr	His	Gly	Ser	Gln
			130					135					140		
Val	Tyr	Val	Thr	Phe	Ala	Val	Ser	Phe	Tyr	Leu	Val	Ala	Gly	Ala	Gly
145					150					155					160
Gly	Ala	Ser	Ile	Leu	Ala	Thr	Ala	Ala	Asn	Leu	Leu	Arg	His	Tyr	Pro
				165					170					175	
Thr	Glu	Glu	Glu	Glu	Gln	Ala	Leu	Glu	Leu	Leu	Ser	Glu	Met	Glu	Glu
				180					185					190	
Asn	Glu	Pro	Tyr	Pro	Ala	Glu	Tyr	Glu	Val	Ile	Asn	Gln	Phe	Gln	Pro
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 <211> 1130
 <212> DNA
 <213> Homo sapiens

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 240
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 420
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 480
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 780
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<210> 6040
 <211> 312
 <212> PRT
 <213> Homo sapiens

<400> 6040
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 Gly Leu Leu Ala Val Leu Arg Ala Gly Pro Gly Pro Glu Ala Leu Leu

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Gln Val Trp	Ala Ala Glu Ser Ala	Leu Arg Gly Glu Pro	Leu Trp Ala		
35	40	45			
Gln Asn Val Val	Pro Glu Ala Glu Gly Glu Asp Asp	Pro Ala Gly Glu			
50	55	60			
Ala Gln Ala Gly Arg	Leu Pro Leu Leu Pro Cys Ala Arg Ala Tyr Val				
65	70	75	80		
Ser Pro Arg Ala Pro	Phe Tyr Arg Pro Leu Ala Pro Glu Leu Arg Ala				
85	90	95			
Arg Gln Leu Glu Leu Gly Ala Glu His Ala Leu Leu Leu Asp Ala Ala					
100	105	110			
Gly Gln Val Phe Ser Trp Gly Gly Arg His Gly Gln Leu Gly His					
115	120	125			
Gly Thr Leu Glu Ala Glu Leu Glu Pro Arg Leu Leu Glu Ala Leu Gln					
130	135	140			
Gly Leu Val Met Ala Glu Val Ala Ala Gly Gly Trp His Ser Val Cys					
145	150	155	160		
Val Ser Glu Thr Gly Asp Ile Tyr Ile Trp Gly Trp Asn Glu Ser Gly					
165	170	175			
Gln Leu Ala Leu Pro Thr Arg Asn Leu Ala Glu Asp Gly Glu Thr Val					
180	185	190			
Ala Arg Glu Ala Thr Glu Leu Asn Glu Asp Gly Ser Gln Val Lys Arg					
195	200	205			
Thr Gly Gly Ala Glu Asp Gly Ala Pro Ala Pro Phe Ile Ala Val Gln					
210	215	220			
Pro Phe Pro Ala Leu Leu Asp Leu Pro Met Gly Ser Asp Ala Val Lys					
225	230	235	240		
Ala Ser Cys Gly Ser Arg His Thr Ala Val Val Thr Arg Thr Gly Glu					
245	250	255			
Leu Tyr Thr Trp Gly Trp Gly Lys Tyr Gly Gln Leu Gly His Glu Asp					
260	265	270			
Thr Thr Ser Leu Asp Arg Pro Arg Arg Val Glu Tyr Phe Val Asp Lys					
275	280	285			
Gln Leu Gln Val Lys Ala Val Thr Cys Gly Pro Trp Asn Thr Tyr Val					
290	295	300			
Tyr Ala Val Glu Lys Gly Lys Ser					
305	310				

<210> 6041

<211> 291

<212> DNA

<213> Homo sapiens

<400> 6041

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120
cggttggagc agcaaaagca gcagataatg gcagctttaa actcccagac tgccgtgcag
180
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240
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291

<210> 6042
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 6042
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 20 25 30
 Arg Arg Ile Glu Glu Glu Arg Leu Arg Leu Glu Gln Gln Lys Gln Gln
 35 40 45
 Ile Met Ala Ala Leu Asn Ser Gln Thr Ala Val Gln Phe Gln Gln Tyr
 50 55 60
 Ala Ala Gln Gln Tyr Pro Gly Asn Tyr Glu Gln Gln Gln Ile Leu Ile
 65 70 75 80
 Arg Gln Leu Gln Glu Gln His Tyr Gln Gln Tyr Met Gln Gln Leu Tyr
 85 90 95
 His

<210> 6043
 <211> 558
 <212> DNA
 <213> Homo sapiens

<400> 6043
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 420
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<210> 6044
 <211> 152
 <212> PRT
 <213> Homo sapiens

<400> 6044

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 Cys Tyr Leu Ser Asn Val Asp Gly Gly Glu His Pro Cys Pro Arg Leu
 20 25 30
 Lys Ile Ala Pro Leu Glu Ser His His Arg Pro Lys Arg Pro Asp Asp
 35 40 45
 Pro Pro Gly Thr Leu Asn Pro Cys Pro Glu Arg Gly Gly Ala Gly Val
 50 55 60
 Trp Ile Pro Ala Gly Ser Phe Gly Thr Gly Lys Asn Arg Gly Cys Ser
 65 70 75 80
 Asp Arg Val Phe Thr Lys Thr Cys Ile Arg Gln Asp Pro Gly Arg Met
 85 90 95
 Trp Val Ala Pro Pro Leu Cys Trp Ala Arg Arg Met Cys Pro His Arg
 100 105 110
 Ser Gln Ile Leu Phe Pro Gln Trp Val Val Gln Asp Thr Leu Asn Phe
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 Cys Met Asn Trp Asp Ile Gln Asn Ser Leu Glu Gln Pro Pro Pro Ser
 130 135 140
 Thr Leu Cys Leu Asp Ile Ser Tyr
 145 150

<210> 6045

<211> 1916

<212> DNA

<213> Homo sapiens

<400> 6045

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 420
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 1860
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 1916

<210> 6046

<211> 457

<212> PRT

<213> Homo sapiens

<400> 6046

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 20 25 30
 Glu Val Ile Ala Val Val Met Asp Val Phe Thr Asp Ile Asp Ile Phe
 35 40 45
 Arg Asp Leu Gln Glu Ile Cys Arg Lys Gln Gly Val Ala Val Tyr Ile
 50 55 60
 Leu Leu Asp Gln Ala Leu Leu Ser Gln Phe Leu Asp Met Cys Met Asp

65					70					75					80
Leu	Lys	Val	His	Pro	Glu	Gln	Glu	Lys	Leu	Met	Thr	Val	Arg	Thr	Ile
				85					90					95	
Thr	Gly	Asn	Ile	Tyr	Tyr	Ala	Arg	Ser	Gly	Thr	Lys	Ile	Ile	Gly	Lys
			100					105					110		
Val	His	Glu	Lys	Phe	Thr	Leu	Ile	Asp	Gly	Ile	Arg	Val	Ala	Thr	Gly
		115					120					125			
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Ser	Glu	Glu	Asp	Tyr	Phe	Ser	Ser	His	Arg	Asp	Glu	Leu	Gln	Ser	Arg
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Lys	Ala	Ile	Asp	Ala	Ala	Thr	Gln	Thr	Glu	Pro	Gly	Glu	Glu	Met	Pro
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<210> 6047

<211> 773

<212> DNA

<213> Homo sapiens

<400> 6047

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<210> 6048

<211> 129

<212> PRT

<213> Homo sapiens

<400> 6048

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Pro	His	Pro	Pro	Ser	Leu	Ser	Pro	Gln	Ser	Leu	Leu	Tyr	Ser	Gln	Ala
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<210> 6049

<211> 479

<212> DNA

<213> Homo sapiens

<400> 6049

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<211> 159

<212> PRT

<213> Homo sapiens

<400> 6050

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35     40     45
Ser Asn Glu Arg Glu Asp Phe Asp Ser Thr Ser Ser Ser Ser Ser Thr
50     55     60
Pro Pro Leu Gln Pro Arg Asp Ser Ala Ser Pro Ser Thr Ser Ser Phe
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Cys Leu Gly Val Ser Val Ala Ala Ser Ser His Val Pro Ile Gln Lys
85     90     95
Lys Leu Arg Phe Glu Asp Thr Leu Glu Phe Val Gly Phe Asp Ala Lys
100    105    110
Met Ala Glu Glu Ser Ser Ser Ser Ser Ser Ser Ser Pro Thr Ala
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<210> 6051

<211> 2404

<212> DNA

<213> Homo sapiens

<400> 6051

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<211> 518

<212> PRT

<213> Homo sapiens

<400> 6052

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Val	Val	Leu	Cys	Gln	Ser	Leu	Arg	Cys	Thr	Ser	Arg	Ser	Ser	Gly	Asp
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<210> 6053

<211> 3257

<212> DNA

<213> Homo sapiens

<400> 6053

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3257

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<211> 382

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<213> Homo sapiens

<400> 6054

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<211> 285

<212> PRT

<213> Homo sapiens

<400> 6056

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<211> 3924

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 6058

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			100					105					110		
Leu	Leu	Leu	Ala	Val	Met	Ser	Phe	Asp	Arg	Tyr	Val	Ala	Val	Cys	Arg
			115					120					125		
Pro	Leu	His	Tyr	Val	Val	Ile	Met	Asn	Tyr	Trp	Phe	Cys	Leu	Arg	Met
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			165						170					175	
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			180					185					190		
Lys	Pro	Ile	Glu	Ala	Glu	Leu	Phe	Phe	Phe	Ser	Val	Leu	Ile	Leu	Leu
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225					230					235				240	
Cys	Gly	Ser	His	Met	Ile	Val	Val	Ser	Leu	Phe	Tyr	Gly	Thr	Ala	Ile
			245						250					255	
Tyr	Met	Tyr	Leu	Gln	Pro	Pro	Ser	Ser	Thr	Ser	Lys	Asp	Trp	Gly	Lys

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Met	Val	Ser	Leu	Phe	Tyr	Gly	Ile	Thr	Ser	Met	Leu	Asn	Ser	Leu
	275					280				285				
Ile	Tyr	Ser	Leu	Arg	Asn	Lys	Asp	Met	Lys	Glu	Ala	Phe	Lys	Arg
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<210> 6061

<211> 1582

<212> DNA

<213> Homo sapiens

<400> 6061

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<210> 6062

<211> 226

<212> PRT

<213> Homo sapiens

<400> 6062

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			20					25					30		
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Leu	Ile	Gly	Ala	Met	Glu	Thr	Gln	Ser	Glu	Pro	Ser	Glu	Leu	Glu	Leu
	50					55					60				
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Glu	Asp	Trp	Ile	Glu	Asp	Ala	Ser	Gly	Leu	Met	Ser	His	Cys	Ile	Ala
			85						90					95	
Ile	Leu	Lys	Ile	Cys	His	Thr	Leu	Thr	Glu	Lys	Leu	Val	Ala	Met	Thr
			100					105					110		
Met	Gly	Ser	Gly	Ala	Lys	Met	Lys	Thr	Ser	Ala	Ser	Val	Ser	Asp	Ile
			115				120					125			
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	130					135					140				
Ser	Met	Tyr	Pro	Pro	Leu	Asp	Pro	Lys	Leu	Leu	Asp	Ala	Arg	Thr	Thr
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Cys	His	Leu	Thr	Gly	Gly	Leu	Asp	Trp	Ile	Asp	Gln	Ser	Leu	Ser	Ala
			180					185					190		
Ala	Glu	Glu	His	Leu	Glu	Val	Leu	Arg	Glu	Ala	Ala	Leu	Ala	Ser	Glu
			195				200					205			
Pro	Asp	Lys	Gly	Leu	Pro	Gly	Pro	Glu	Gly	Phe	Leu	Gln	Glu	Gln	Ser
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<210> 6063

<211> 2286

<212> DNA

<213> Homo sapiens

<400> 6063

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<210> 6064

<211> 233

<212> PRT

<213> Homo sapiens

<400> 6064

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		20					25				30				
Phe	Leu	His	Pro	Asp	Leu	Gly	Val	Gly	Gly	Ala	Glu	Arg	Leu	Val	Leu
	35				40					45					
Asp	Ala	Ala	Leu	Ala	Leu	Gln	Ala	Arg	Gly	Cys	Ser	Val	Lys	Ile	Trp
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Pro	Val	Arg	Cys	Ala	Gly	Asp	Trp	Leu	Pro	Arg	Gly	Leu	Gly	Trp	Gly
			85				90						95		
Gly	Arg	Gly	Ala	Ala	Val	Cys	Ala	Tyr	Val	Arg	Met	Val	Phe	Leu	Ala
		100					105					110			
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          180          185          190
Phe Thr Ala Ala Val Phe Lys Glu Thr Phe Lys Ser Leu Ser His Ile
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<210> 6065

<211> 2084

<212> DNA

<213> Homo sapiens

<400> 6065

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<210> 6066

<211> 80

<212> PRT

<213> Homo sapiens

<400> 6066

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Arg	Val	Leu	Arg	Gly	Val	Asp	Asp	Leu	Asp	Phe	Phe	Ile	Gly	Asp	Glu
		20						25				30			
Ala	Ile	Asp	Lys	Pro	Thr	Tyr	Ala	Thr	Lys	Trp	Pro	Ile	Arg	His	Gly
		35					40				45				
Ile	Ile	Glu	Asp	Trp	Asp	Leu	Met	Glu	Arg	Phe	Met	Glu	Gln	Val	Val
	50					55				60					
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<210> 6067

<211> 406

<212> DNA

<213> Homo sapiens

<400> 6067

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<210> 6068

<211> 117

<212> PRT

<213> Homo sapiens

<400> 6068

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Ser Leu Phe Leu Ser Gly Asn Val Ser Ser Arg Arg Met Arg Thr Ala
35     40     45
Ser Arg Ser Ser Glu Pro Pro Ala Cys Pro Arg His Trp Pro Cys Pro
50     55     60
Pro Gly Leu Pro Phe Gly Gln Gly Ala Val Ala Arg Ala Ala Pro Cys
65     70     75     80
Pro Ala Tyr Ser His Ser Ala Val Gly Arg Pro Pro Leu Pro Arg Lys
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<210> 6069

<211> 456

<212> DNA

<213> Homo sapiens

<400> 6069

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180

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<210> 6070
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 6070
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 35 40 45
 Gly Val Pro Asn Val Gly Lys Ser Ser Leu Ile Asn Ser Leu Arg Arg
 50 55 60
 Gln His Leu Arg Lys Gly Lys Ala Thr Arg Val Gly Gly Glu Pro Gly
 65 70 75 80
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 Pro Leu Cys Gly Phe Arg Leu Leu Thr Thr Leu Pro Ser Pro Pro Leu
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<210> 6071
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 <212> DNA
 <213> Homo sapiens

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<211> 76

<212> PRT

<213> Homo sapiens

<400> 6072

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<211> 387

<212> DNA

<213> Homo sapiens

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<211> 69

<212> PRT

<213> Homo sapiens

<400> 6074

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<212> DNA

<213> Homo sapiens

<400> 6075

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<210> 6076

<211> 601

<212> PRT

<213> Homo sapiens

<400> 6076

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Pro	Cys	Leu	Leu	Asp	Ala	Asp	Lys	Tyr	Phe	Cys	Glu	Cys	Cys	Arg	Glu	
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<211> 2093

<212> DNA

<213> Homo sapiens

<400> 6077

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<210> 6078

<211> 213

<212> PRT

<213> Homo sapiens

<400> 6078

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			115				120					125			
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			130				135				140				
Trp	Glu	Gln	Thr	Leu	Pro	Gly	Ser	Ser	Asp	Glu	Glu	Ile	Ser	Asp	Glu
					150					155				160	
Glu	Gly	Ser	Gly	Asp	Glu	Asp	Ser	Glu	Gly	Leu	Gly	Leu	Glu	Glu	Tyr
				165					170					175	
Asp	Glu	Asp	Asp	Leu	Gly	Ala	Ala	Glu	Glu	Gln	Glu	Cys	Gly	Asp	Gln

	180		185		190
Gly	Glu	Gln	Glu	Asp	Glu
			Lys	Pro	Leu
			Cys	Lys	Asn
				Thr	Gly
					Leu
					Gln
	195		200		205
Cys	Pro	Glu	Tyr	Gln	
	210				

<210> 6079

<211> 651

<212> DNA

<213> Homo sapiens

<400> 6079

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120
catgcgcagc ggggccgtgg gtgtacgcgg cgcagcgcgg cagtcctgat ggcccggcat
180
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240
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300
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360
gacatatttc ctgtcaccaa caaagatttc agggattttg tcaggagaaa aaagtatcgg
420
acagaagctg agatgttttg atggagcttt gtctttgagg actttgtctc tgatgagctg
480
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540
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651

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<210> 6080

<211> 162

<212> PRT

<213> Homo sapiens

<400> 6080

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Val	Gly	Ala	Trp	Leu	Lys	Leu	Gly	Asn	Gly	Gln	Ala	Thr	Ser	Met	Val
			20					25					30		
Gln	Leu	Gln	Gly	Gly	Arg	Phe	Leu	Met	Gly	Thr	Asn	Ser	Pro	Asp	Ser
			35				40				45				
Arg	Asp	Gly	Glu	Gly	Pro	Val	Arg	Glu	Ala	Thr	Val	Lys	Pro	Phe	Ala
	50					55					60				
Ile	Asp	Ile	Phe	Pro	Val	Thr	Asn	Lys	Asp	Phe	Arg	Asp	Phe	Val	Arg
65					70				75					80	
Glu	Lys	Lys	Tyr	Arg	Thr	Glu	Ala	Glu	Met	Phe	Gly	Trp	Ser	Phe	Val
				85				90					95		
Phe	Glu	Asp	Phe	Val	Ser	Asp	Glu	Leu	Arg	Asn	Lys	Ala	Thr	Gln	Pro

			100					105					110				
Met	Lys	Ser	Val	Leu	Trp	Trp	Leu	Pro	Val	Glu	Lys	Ala	Phe	Trp	Arg		
		115					120					125					
Gln	Pro	Ala	Gly	Pro	Gly	Ser	Gly	Ile	Arg	Glu	Arg	Leu	Glu	His	Pro		
	130					135					140						
Val	Leu	His	Val	Ser	Trp	Asn	Asp	Ala	Arg	Ala	Tyr	Cys	Ala	Trp	Arg		
145					150					155					160		
Gly	Lys																

<210> 6081

<211> 655

<212> DNA

<213> Homo sapiens

<400> 6081

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120
ggaccagctg ttataacatt gttactagat gaatgtccat tgcccactaa agatgcactc
180
cagaaattga ctgaaattct caatttaaag ggagaagtag cttgccagga ctcaagccat
240
cctgccaaac acaggaacac atctgcagtc ctaggctgct tggccgagaa actagcaggt
300
cctgcaagta taggtttact tagcccagga atactggaat acttgctaca gtgtctgaag
360
ttacagtccc accccacagt catgcttttt gcacttatcg cactggaaaa gtttgcacag
420
acaagtgaaa ataaattgac tatttctgaa tccagtatta gtgaccggct tgtcacattg
480
gagtcctggg ctaatgatcc tgattatctg aaacgtcaag ttggtttctg tgcccagtgg
540
agcttagaca atctcttttt aaaagaaggt agacagctga cctatgagaa agtgaacttg
600
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655

<210> 6082

<211> 218

<212> PRT

<213> Homo sapiens

<400> 6082

Asp	Asn	Asp	Gln	Glu	Pro	Pro	Tyr	Ser	Met	Ile	Thr	Leu	His	Glu	Met		
1				5					10					15			
Ala	Glu	Thr	Asp	Glu	Gly	Trp	Leu	Asp	Val	Val	Gln	Ser	Leu	Ile	Arg		
			20					25				30					
Val	Ile	Pro	Leu	Glu	Asp	Pro	Leu	Gly	Pro	Ala	Val	Ile	Thr	Leu	Leu		
		35					40				45						
Leu	Asp	Glu	Cys	Pro	Leu	Pro	Thr	Lys	Asp	Ala	Leu	Gln	Lys	Leu	Thr		
	50					55				60							
Glu	Ile	Leu	Asn	Leu	Asn	Gly	Glu	Val	Ala	Cys	Gln	Asp	Ser	Ser	His		

```

65          70          75          80
Pro Ala Lys His Arg Asn Thr Ser Ala Val Leu Gly Cys Leu Ala Glu
          85          90          95
Lys Leu Ala Gly Pro Ala Ser Ile Gly Leu Leu Ser Pro Gly Ile Leu
          100         105         110
Glu Tyr Leu Leu Gln Cys Leu Lys Leu Gln Ser His Pro Thr Val Met
          115         120         125
Leu Phe Ala Leu Ile Ala Leu Glu Lys Phe Ala Gln Thr Ser Glu Asn
          130         135         140
Lys Leu Thr Ile Ser Glu Ser Ser Ile Ser Asp Arg Leu Val Thr Leu
145         150         155         160
Glu Ser Trp Ala Asn Asp Pro Asp Tyr Leu Lys Arg Gln Val Gly Phe
          165         170         175
Cys Ala Gln Trp Ser Leu Asp Asn Leu Phe Leu Lys Glu Gly Arg Gln
          180         185         190
Leu Thr Tyr Glu Lys Val Asn Leu Ser Ser Ile Arg Ala Met Leu Asn
          195         200         205
Ser Asn Asp Val Ser Glu Tyr Leu Lys Ile
          210         215

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<210> 6083
 <211> 358
 <212> DNA
 <213> Homo sapiens

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<400> 6083
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120
aatgaaaggc taacagcttt acaagagaag ctgatcgctg aagggcatct aaccaaagcg
180
gtagaagaaa caaagctttc aaaagaaaat cagacaagag caaaagaatc tgatttttca
240
gatactctga gtccaagcaa ggaaaaaagc agtgacgaca ctacagacgc ccaaattggat
300
gagcaagacc taaatgagcc tcttgccaaa gtgtcccttt taaaagatga cttgcagg
358

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<210> 6084
 <211> 101
 <212> PRT
 <213> Homo sapiens

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<400> 6084
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Ala Asp Asn Asp Phe Thr Asn Glu Arg Leu Thr Ala Leu Gln Glu Lys
          20         25         30
Leu Ile Val Glu Gly His Leu Thr Lys Ala Val Glu Glu Thr Lys Leu
          35         40         45
Ser Lys Glu Asn Gln Thr Arg Ala Lys Glu Ser Asp Phe Ser Asp Thr
          50         55         60
Leu Ser Pro Ser Lys Glu Lys Ser Ser Asp Asp Thr Thr Asp Ala Gln

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65		70		75		80									
Met	Asp	Glu	Gln	Asp	Leu	Asn	Glu	Pro	Leu	Ala	Lys	Val	Ser	Leu	Leu
			85					90						95	
Lys	Asp	Asp	Leu	Gln											
			100												

<210> 6085

<211> 2307

<212> DNA

<213> Homo sapiens

<400> 6085

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120
ggttacgaaa cagtgggttg cctgggtgat gttctttaca tcccaatgta ctggtggcat
180
cacatagagt cattactaaa tgggggggatt accatcactg tgaacttctg gtataagggg
240
gtccccaccc ctaagagaat tgaatatcct ctcaaagctc atcagaaagt ggccataatg
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360
ttgaacacaa tgatcaaggg ccgatacaac tagcctgcca ggggtcaagg cctcctgcca
420
ggtgactgct atcccgctcca caccgcttca ttgatgagga caggagactc caagcgctag
480
tattgcacgc tgcacttaat ggactggact cttgccatgg ccaggagtc aggtgttttg
540
agcgaggcag ggcagttggc actccactcc tatttgaggg gacttcatac ccttgccctc
600
tgtgccccctg caccttctct ctctgcccc cgccctaaagt cctgcattca gtgtgtggag
660
ccccagcttt tggttgtcat catgtctgtg tgtatgtag tctgtcaact tcggaatgtg
720
tgcgtgtgtg tgcatgcaca cgcattgatg tatctgttcc ctgttccttc tgggtcaggg
780
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1080
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1140
tatagtttct ctctttcagc accagctctt gccctatgc tgggtaccaa gggagtcttc
1200
ctagctgtgg cttctctagg ttctaggggt gcaagcctct gtgtgtttgt ttgtgtgtgt
1260

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ctgtgtgtgc gtatcacact aggggtgcaa gcctctgggt gtgtgtgtgt gtgtgctgtc
 1320
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 1380
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 1500
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 1560
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 1920
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 2160
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 2280
 aaaaaaaaaa aaaaaaaaaa aaaaaaa
 2307

<210> 6086

<211> 84

<212> PRT

<213> Homo sapiens

<400> 6086

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Arg	Gly	Ala	Ser	Leu	Cys	Val	Phe	Val	Cys	Val	Cys	Leu	Cys	Val	Arg
			20						25				30		
Ile	Thr	Leu	Gly	Val	Gln	Ala	Ser	Gly	Cys	Val	Cys	Val	Cys	Ala	Cys
		35				40					45				
Val	Cys	Val	Cys	Val	Ser	Val	Cys	Val	Cys	Val	Cys	Val	His	Thr	Gly
	50				55				60						
Gln	Pro	Pro	Tyr	Leu	Pro	Arg	Phe	Ser	Thr	Ala	Tyr	Leu	Phe	Gln	Trp
65					70				75					80	
Asp	Ser	Thr	Val												

<210> 6087

<211> 1506

<212> DNA

<213> Homo sapiens

<400> 6087

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420
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600
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660
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<210> 6088

<211> 326

<212> PRT

<213> Homo sapiens

<400> 6088

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Ser	Arg	Ala	Met	Arg	Gly	Cys	Gln	Leu	Leu	Gly	Leu	Arg	Ser	Ser	Trp
			20					25					30		
Pro	Gly	Asp	Leu	Leu	Ser	Ala	Arg	Leu	Leu	Ser	Gln	Glu	Lys	Arg	Ala
		35					40					45			
Ala	Glu	Thr	His	Phe	Gly	Phe	Glu	Thr	Val	Ser	Glu	Glu	Glu	Lys	Gly
	50					55					60				
Gly	Lys	Val	Tyr	Gln	Val	Phe	Glu	Ser	Val	Ala	Lys	Lys	Tyr	Asp	Val
65					70				75					80	
Met	Asn	Asp	Met	Met	Ser	Leu	Gly	Ile	His	Arg	Val	Trp	Lys	Asp	Leu
				85					90					95	
Leu	Leu	Trp	Lys	Met	His	Pro	Leu	Pro	Gly	Thr	Gln	Leu	Leu	Asp	Met
			100					105					110		
Ala	Gly	Gly	Thr	Gly	Asp	Ile	Ala	Phe	Arg	Phe	Leu	Asn	Tyr	Val	Gln
	115						120					125			
Ser	Gln	His	Gln	Arg	Lys	Gln	Lys	Arg	Gln	Leu	Arg	Ala	Gln	Gln	Asn
	130					135					140				
Leu	Ser	Trp	Glu	Glu	Ile	Ala	Lys	Glu	Tyr	Gln	Asn	Glu	Glu	Asp	Ser
145					150				155					160	
Leu	Gly	Gly	Ser	Arg	Val	Val	Val	Cys	Asp	Ile	Asn	Lys	Glu	Met	Leu
				165					170					175	
Lys	Val	Gly	Lys	Gln	Lys	Ala	Leu	Ala	Gln	Gly	Tyr	Arg	Ala	Gly	Leu
		180						185					190		
Ala	Trp	Val	Leu	Gly	Asp	Ala	Glu	Glu	Leu	Pro	Phe	Asp	Asp	Asp	Lys
	195						200					205			
Phe	Asp	Ile	Tyr	Thr	Ile	Ala	Phe	Gly	Ile	Arg	Asn	Val	Thr	His	Ile
	210					215					220				
Asp	Gln	Ala	Leu	Gln	Glu	Ala	His	Arg	Val	Leu	Lys	Pro	Gly	Gly	Arg
225					230					235				240	
Phe	Leu	Cys	Leu	Glu	Phe	Ser	Gln	Val	Asn	Asn	Pro	Leu	Ile	Ser	Arg
				245					250					255	
Leu	Tyr	Asp	Leu	Tyr	Ser	Phe	Gln	Val	Ile	Pro	Val	Leu	Gly	Glu	Val
		260						265					270		
Ile	Ala	Gly	Asp	Trp	Lys	Ser	Tyr	Gln	Tyr	Leu	Val	Glu	Ser	Ile	Arg
	275						280					285			
Arg	Phe	Pro	Ser	Gln	Glu	Glu	Phe	Lys	Asp	Met	Ile	Glu	Asp	Ala	Gly
	290					295					300				
Phe	His	Lys	Val	Thr	Tyr	Glu	Ser	Leu	Thr	Ser	Gly	Ile	Val	Ala	Ile
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His	Ser	Gly	Phe	Lys	Leu										

325

<210> 6089

<211> 4211

<212> DNA

<213> Homo sapiens

<400> 6089

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120
tcccagagaag ttatagactt agacccccca gctgagactt cccaggagca ggaagacctt
180
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240
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360
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420
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480
gaaaatatac agcgagaact tgaggaacgc agacagcaga ttgttgccctg ccctgatgtg
540
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1260
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2100
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2220
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<211> 839

<212> PRT

<213> Homo sapiens

<400> 6090

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Lys	Phe	Phe	Leu	Gln	Ala	Ser	Asn	Phe	Ile	Gln	His	Arg	Arg	Ile	His
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Lys Gln Gly Ile Pro Met Lys Glu Ile Leu Gly Gln Pro Ser Ser Lys
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Arg Met Asn Tyr Ser Glu Val Pro Tyr Val His Lys Lys Ser Ser Thr
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Gly Glu Arg Pro His Lys Cys Asn Glu Cys Gly Lys Ser Phe Ile Gln
545          550          555          560
Ser Ala His Leu Ile Gln His Gln Arg Ile His Thr Gly Glu Lys Pro
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Phe Arg Cys Glu Glu Cys Gly Lys Ser Tyr Asn Gln Arg Val His Leu
          580          585          590
Thr Gln His Gln Arg Val His Thr Gly Glu Lys Pro Tyr Thr Cys Pro
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Leu Cys Gly Lys Ala Phe Arg Val Arg Ser His Leu Val Gln His Gln
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Ser Val His Ser Gly Glu Arg Pro Phe Lys Cys Asn Glu Cys Gly Lys
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Gly Phe Gly Arg Arg Ser His Leu Ala Gly His Leu Arg Leu His Ser
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Arg Glu Lys Ser His Gln Cys Arg Glu Cys Gly Glu Ile Phe Phe Gln
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Tyr Val Ser Leu Ile Glu His Gln Val Leu His Met Gly Gln Lys Asn
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Glu Lys Asn Gly Ile Cys Glu Glu Ala Tyr Ser Trp Asn Leu Thr Val
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Arg Thr His Thr Ala Glu Lys Pro Tyr Gln Cys Asp Ile Cys Arg Glu
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Asn Val Gly Gln Cys Ser His Thr Lys Gln His Gln Lys Ile Tyr Ser
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Ser Thr Lys Ser His Gln Cys His Glu Cys Gly Arg Gly Phe Thr Leu
770          775          780
Lys Ser His Leu Asn Gln His Gln Arg Ile His Thr Gly Glu Lys Pro
785          790          795          800
Phe Gln Cys Lys Glu Cys Gly Met Asn Phe Ser Trp Ser Cys Ser Leu
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Phe Lys His Leu Arg Ser His Glu Arg Thr Asp Pro Ile Asn Thr Leu
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<210> 6091

<211> 1336

<212> DNA

<213> Homo sapiens

<400> 6091

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<210> 6092

<211> 118

<212> PRT

<213> Homo sapiens

<400> 6092

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Val Thr Arg Gln Val Pro Ser Pro Pro Ser Gly Phe Arg Leu Pro Ser
      50      55      60
Ser Arg His Glu Gly Pro Ser Pro Pro Arg Asp Leu Gly Thr Ser Gly
65      70      75      80
Pro Ser Arg Ala Ala Ser His Lys Pro Ser Asn Glu Gln Arg Asp Ala
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<210> 6093

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<212> DNA

<213> Homo sapiens

<400> 6093

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<210> 6094

<211> 136

<212> PRT

<213> Homo sapiens

<400> 6094

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Ser	Cys	Asn	Phe	Leu	Gly	Glu	Glu	Thr	Phe	Ser	Ser	Phe	Pro	Phe	Leu
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<213> Homo sapiens

<400> 6097

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<210> 6098

<211> 631

<212> PRT

<213> Homo sapiens

<400> 6098

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 35 40 45
 Arg Cys Gln Glu Met Gly Ala Arg Ala Ala Lys Ala Val Glu Ser Gly
 50 55 60
 Ala Leu Glu Leu Ser Pro Ser Phe His Gln Lys Asn Trp Gln His Trp
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 Phe Ser His Ile Gly Asp Trp Cys Val Ser Arg Gln Leu Trp Trp Gly
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<210> 6099

<211> 3957

<212> DNA

<213> Homo sapiens

<400> 6099

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<210> 6100

<211> 1102

<212> PRT

<213> Homo sapiens

<400> 6100

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Gln	Ile	Val	Thr	Ala	Val	Tyr	Phe	Cys	His	Cys	Arg	Asn	Ile	Val
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<211> 1447

<212> DNA

<213> Homo sapiens

<400> 6101

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<211> 123

<212> PRT

<213> Homo sapiens

<400> 6102

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<210> 6103

<211> 309

<212> DNA

<213> Homo sapiens

<400> 6103

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<210> 6104

<211> 71

<212> PRT

<213> Homo sapiens

<400> 6104

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<210> 6105

<211> 1846

<212> DNA

<213> Homo sapiens

<400> 6105

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420

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<210> 6106

<211> 405

<212> PRT

<213> Homo sapiens

<400> 6106

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 20      25      30
Asn Ser Thr Gln Pro Ser Thr Ala Gly Met Lys Trp Cys Leu Pro Phe
 35      40      45
His Leu Leu Cys Arg Gly Pro Ser Gly Ser Leu Ser Ala Pro Pro Ala
 50      55      60
Ala Ser Val Ile Ser Ala Pro Pro Ser Ser Ser Arg His Arg Lys
 65      70      75      80
Arg Arg Arg Thr Ser Ser Lys Ser Glu Ala Gly Ala Arg Gly Gly Gly
 85      90      95
Gln Gly Ser Lys Glu Lys Gly Arg Gly Ser Trp Gly Gly Arg His His
100      105      110
His His His Pro Leu Pro Ala Ala Gly Phe Lys Lys Gln Gln Arg Lys
115      120      125
Phe Gln Tyr Gly Asn Tyr Cys Lys Tyr Tyr Gly Tyr Arg Asn Pro Ser
130      135      140
Cys Glu Asp Gly Arg Leu Arg Val Leu Lys Pro Glu Trp Phe Arg Gly
145      150      155      160
Arg Asp Val Leu Asp Leu Gly Cys Asn Val Gly His Leu Thr Leu Ser
165      170      175
Ile Ala Cys Lys Trp Gly Pro Ser Arg Met Val Gly Leu Asp Ile Asp
180      185      190
Ser Arg Leu Ile His Ser Ala Arg Gln Asn Ile Arg His Tyr Leu Ser
195      200      205
Glu Glu Leu Arg Leu Pro Pro Gln Thr Leu Glu Gly Asp Pro Gly Ala
210      215      220
Glu Gly Glu Glu Gly Thr Thr Thr Val Arg Lys Arg Ser Cys Phe Pro
225      230      235      240
Ala Ser Leu Thr Ala Ser Arg Gly Pro Ile Ala Ala Pro Gln Val Pro
245      250      255
Leu Asp Gly Ala Asp Thr Ser Val Phe Pro Asn Asn Val Val Phe Val
260      265      270
Thr Gly Asn Tyr Val Leu Asp Arg Asp Asp Leu Val Glu Ala Gln Thr
275      280      285
Pro Glu Tyr Asp Val Val Leu Cys Leu Ser Leu Thr Lys Trp Val His
290      295      300
Leu Asn Trp Gly Asp Glu Gly Leu Lys Arg Met Phe Arg Arg Ile Tyr
305      310      315      320
Arg His Leu Arg Pro Gly Gly Ile Leu Val Leu Glu Pro Gln Pro Trp
325      330      335
Ser Ser Tyr Gly Lys Arg Lys Thr Leu Thr Glu Thr Ile Tyr Lys Asn
340      345      350
Tyr Tyr Arg Ile Gln Leu Lys Pro Glu Gln Phe Ser Ser Tyr Leu Thr
355      360      365
Ser Pro Asp Val Gly Phe Ser Ser Tyr Glu Leu Val Ala Thr Pro His
370      375      380
Asn Thr Ser Lys Gly Phe Gln Arg Pro Val Tyr Leu Phe His Lys Ala
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Arg Ser Pro Ser His
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<210> 6107

<211> 896

<212> DNA

<213> Homo sapiens

<400> 6107

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120
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180
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240
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300
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420
cctgccacca ccatcacctc attaccacaca ccctcaatga gggtgacatc agtgaccccc
480
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540
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660
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720
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780
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<210> 6108

<211> 124

<212> PRT

<213> Homo sapiens

<400> 6108

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Xaa Asn Leu Thr Arg Thr Val Met Arg Pro Gly Leu Gly Gly Arg Gln
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Gly Leu Ser Ser Asp Leu Arg Gly Ala Ser Gly Leu Leu Leu Pro Ala
20           25           30
Pro Ala Cys Leu Leu Gly Arg Pro Trp Met Ser Arg Arg Cys Ser Arg
35           40           45
Leu Gly Ser Thr Pro Pro Pro Ala Pro Ala Ser Pro Val Glu Ser Pro
50           55           60
Arg Pro Ser Pro Ala Ser Ser Ala Phe Ser Ser Leu Pro Ser Asp Gly
65           70           75           80
Trp Gly Ser Ser Val Gly Ser Gly Leu Pro Trp Pro Ala Thr Arg Trp

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	85		90		95
Ser Thr Cys	Pro Arg Trp Arg Thr	Asp Val Ser Pro Ala Asp Thr Ile			
	100	105	110		
Ala Pro Arg Ser Trp Leu Leu Pro Leu Ser Ala Thr					
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<210> 6109

<211> 2087

<212> DNA

<213> Homo sapiens

<400> 6109

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120
ggtagcttca gaggctccag tgctgtggg gctggagggtg aagttggggg ccctgggtgct
180
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720
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780
caggtgggtg ctggctgtgg gatcctcttc tcatgcatga cacctctagg catcgggctg
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900
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1140
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1260

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atgggtcaagt cgctagagac atatcagggg acattaggat tggggaagac acttgactgc
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 2087

<210> 6110

<211> 323

<212> PRT

<213> Homo sapiens

<400> 6110

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Ser	Phe	Arg	Ala	Ser	Ser	Ala	Cys	Gly	Ala	Gly	Gly	Glu	Val	Gly	Gly
			20					25					30		
Pro	Gly	Ala	Ala	Ala	Gly	Leu	Thr	Leu	Leu	Cys	Ser	Leu	Val	Pro	Ile
			35				40					45			
Cys	Val	Leu	Arg	Arg	Pro	Gly	Ala	Asn	His	Glu	Gly	Ser	Ala	Ser	Arg
			50			55					60				
Gln	Lys	Ala	Leu	Ser	Leu	Val	Ser	Cys	Phe	Ala	Gly	Gly	Val	Phe	Leu
65					70				75					80	
Ala	Thr	Cys	Leu	Leu	Asp	Leu	Leu	Pro	Asp	Tyr	Leu	Ala	Ala	Ile	Asp
				85				90						95	
Glu	Ala	Leu	Ala	Ala	Leu	His	Val	Thr	Leu	Gln	Phe	Pro	Leu	Gln	Glu
			100				105					110			
Phe	Ile	Leu	Ala	Met	Gly	Phe	Phe	Leu	Val	Leu	Val	Met	Glu	Gln	Ile
			115				120					125			
Thr	Leu	Ala	Tyr	Lys	Glu	Gln	Ser	Gly	Pro	Ser	Pro	Leu	Glu	Glu	Thr
			130			135					140				
Arg	Ala	Leu	Leu	Gly	Thr	Val	Asn	Gly	Gly	Pro	Gln	His	Trp	His	Asp

145					150					155					160
Gly	Pro	Gly	Val	Pro	Gln	Ala	Ser	Gly	Ala	Pro	Ala	Thr	Pro	Ser	Ala
				165					170					175	
Leu	Arg	Ala	Cys	Val	Leu	Val	Phe	Ser	Leu	Ala	Leu	His	Ser	Val	Phe
			180					185					190		
Glu	Gly	Leu	Ala	Val	Gly	Leu	Gln	Arg	Asp	Arg	Ala	Arg	Ala	Met	Glu
		195					200				205				
Leu	Cys	Leu	Ala	Leu	Leu	Leu	His	Lys	Gly	Ile	Leu	Ala	Val	Ser	Leu
	210					215				220					
Ser	Leu	Arg	Leu	Leu	Gln	Ser	His	Leu	Arg	Ala	Gln	Val	Val	Ala	Gly
225					230					235					240
Cys	Gly	Ile	Leu	Phe	Ser	Cys	Met	Thr	Pro	Leu	Gly	Ile	Gly	Leu	Gly
			245					250					255		
Ala	Ala	Leu	Ala	Glu	Ser	Ala	Gly	Pro	Leu	His	Gln	Leu	Ala	Gln	Ser
		260					265				270				
Val	Leu	Glu	Gly	Met	Ala	Ala	Gly	Thr	Phe	Leu	Tyr	Ile	Thr	Phe	Leu
	275					280				285					
Glu	Ile	Leu	Pro	Gln	Glu	Leu	Ala	Ser	Ser	Glu	Gln	Arg	Ile	Leu	Lys
	290				295					300					
Val	Ile	Leu	Leu	Leu	Ala	Gly	Phe	Ala	Leu	Leu	Thr	Gly	Leu	Leu	Phe
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<210> 6111

<211> 1706

<212> DNA

<213> Homo sapiens

<400> 6111

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180
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720

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<210> 6112

<211> 110

<212> PRT

<213> Homo sapiens

<400> 6112

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			20					25					30		
Pro	Leu	Pro	Gly	Phe	Lys	Gln	Phe	Ser	Cys	Arg	Ser	Leu	Pro	Ser	Ser
			35				40					45			
Trp	Asp	Tyr	Arg	His	Ala	Pro	Pro	Arg	Gln	Ala	Asn	Phe	Cys	Ile	Phe
	50					55				60					
Ser	Arg	Asp	Gly	Val	Ser	Pro	Cys	Trp	Pro	Gly	Trp	Ser	Gln	Thr	Pro
65					70					75				80	
Asp	Leu	Arg	Arg	Ser	Thr	His	Leu	Ser	Val	Pro	Lys	Cys	Trp	Asp	Tyr
				85					90					95	
Arg	Arg	Glu	Pro	Pro	His	Leu	Ala	Tyr	Glu	Trp	Ser	Phe	Asn		

100

105

110

<210> 6113

<211> 1095

<212> DNA

<213> Homo sapiens

<400> 6113

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780
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<210> 6114

<211> 87

<212> PRT

<213> Homo sapiens

<400> 6114

Met Cys Phe Phe Val Glu Leu Lys Lys Ala Ser Lys Arg Met Thr Cys

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His Lys Arg Tyr Lys Ile Gln Lys Lys Val Arg Glu His His Arg Lys			
20	25	30	
Leu Arg Lys Glu Ala Lys Lys Arg Gly His Lys Lys Pro Arg Lys Asp			
35	40	45	
Pro Gly Val Pro Asn Ser Ala Pro Phe Lys Glu Ala Leu Leu Glu Glu			
50	55	60	
Ala Glu Leu Arg Lys Gln Arg Leu Glu Glu Leu Lys Gln Gln Gln Lys			
65	70	75	80
Leu Asp Arg Gln Lys Glu Leu			
85			

<210> 6115

<211> 411

<212> DNA

<213> Homo sapiens

<400> 6115

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180
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411

<210> 6116

<211> 129

<212> PRT

<213> Homo sapiens

<400> 6116

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20	25	30	
Gln Val Lys Thr Pro Thr Leu Gln Val Arg Gly Ala Ser Ala Leu Ala			
35	40	45	
Pro Gln Phe Pro Gln Arg Asn Arg Leu Leu Ala Ser Arg Val Gly Tyr			
50	55	60	
Arg Val Ser Val Leu His Gly Ile Tyr Glu Asp Val Pro Pro Lys Leu			
65	70	75	80
Leu Pro Pro Pro Pro Trp Asp Ala Thr Val Arg Pro Ala Asp Glu Phe			
85	90	95	
Leu Pro Gln Arg Pro Arg Glu Gly Gly Leu Arg Ala Ala Ala Ala Ala			
100	105	110	
Thr Gly Gly Glu Ala Ser Ala Gly Asn Leu Gly Pro Gly Gly Ala Arg			

115 120 125

Arg

<210> 6117
 <211> 962
 <212> DNA
 <213> Homo sapiens

<400> 6117
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 180
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 780
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<210> 6118
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 6118
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	35						40					45			
Thr	Cys	Ala	Ile	Cys	Arg	Val	Gln	Val	Met	Asp	Ala	Cys	Leu	Arg	Cys
	50						55					60			
Gln	Ala	Glu	Asn	Lys	Gln	Glu	Asp	Cys	Val	Val	Val	Trp	Gly	Glu	Cys
65					70					75				80	
Asn	His	Ser	Phe	His	Asn	Cys	Cys	Met	Ser	Leu	Trp	Val	Lys	Gln	Asn
				85					90					95	
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<210> 6119

<211> 375

<212> DNA

<213> Homo sapiens

<400> 6119

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<210> 6120

<211> 118

<212> PRT

<213> Homo sapiens

<400> 6120

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			20					25					30		
Gln	Arg	Gly	Pro	Thr	Glu	Leu	Met	Pro	Ala	Cys	Phe	Lys	Pro	Thr	Asn
		35					40					45			
Glu	Asn	Ser	Pro	Trp	Glu	Thr	Cys	Leu	Asp	Asn	Thr	Leu	Asp	Pro	Asn
	50					55					60				
Lys	Cys	Phe	Asn	Pro	Thr	Ser	Pro	Leu	Ser	Leu	Pro	Leu	Ser	Cys	Pro
65					70					75				80	
Tyr	Pro	Leu	Val	Glu	His	Val	Cys	Pro	Lys	Arg	Pro	Cys	Lys	Val	Cys
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105

110

<210> 6121
<211> 1039
<212> DNA
<213> Homo sapiens

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360
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<210> 6122
<211> 221
<212> PRT
<213> Homo sapiens

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Cys His Ile Cys Phe Glu Leu Asn Ile Glu Gly Val Pro Lys Ser Asp			
35	40	45	
Leu Leu His Thr Lys Ser Leu Arg Gly His Lys Asp Cys Phe Glu Lys			
50	55	60	
Tyr His Leu Ile Ala Asn Gln Gly Cys Pro Arg Ser Lys Leu Ser Lys			
65	70	75	80
Ser Thr Tyr Glu Glu Val Lys Thr Ile Leu Ser Lys Lys Ile Asn Trp			
85	90	95	
Ile Val Gln Tyr Ala Gln Asn Lys Asp Leu Asp Ser Asp Ser Glu Cys			
100	105	110	
Ser Lys Lys Pro Gln His His Leu Phe Asn Phe Arg His Lys Pro Glu			
115	120	125	
Glu Lys Leu Leu Pro Gln Phe Glu Ser Gln Val Pro Lys Tyr Ser Ala			
130	135	140	
Lys Trp Ile Asp Gly Ser Ala Gly Gly Ile Ser Asn Cys Thr Gln Arg			
145	150	155	160
Ile Leu Glu Gln Arg Glu Asn Thr Asp Phe Gly Leu Ser Met Leu Gln			
165	170	175	
Asp Ser Gly Ala Thr Leu Cys Arg Asn Ser Val Leu Trp Pro His Ser			
180	185	190	
His Asn Gln Ala Gln Lys Lys Glu Glu Thr Ile Ser Ser Pro Glu Ala			
195	200	205	
Asn Val Gln Thr Gln His Pro His Tyr Ser Arg Glu Glu			
210	215	220	

<210> 6123

<211> 900

<212> DNA

<213> Homo sapiens

<400> 6123

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480
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600

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<210> 6124

<211> 300

<212> PRT

<213> Homo sapiens

<400> 6124

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		20						25					30		
Cys	Thr	Pro	Ala	Trp	Ala	Thr	Arg	Ala	Lys	Gln	Gln	Glu	Lys	Lys	Lys
		35					40					45			
Glu	Ala	Ala	Leu	Cys	Pro	Lys	Pro	Thr	Ser	Arg	Ser	Pro	Asn	Leu	Gly
	50					55					60				
Pro	Leu	Gly	Leu	Phe	Ser	Leu	Ser	Val	Pro	Asn	Leu	Leu	Leu	Ala	Gly
65					70					75					80
Asn	Lys	Pro	Pro	Gly	Leu	Leu	Pro	Arg	Lys	Gly	Leu	Tyr	Met	Ala	Asn
				85					90					95	
Asp	Leu	Lys	Leu	Leu	Arg	His	His	Leu	Gln	Ile	Pro	Ile	His	Phe	Pro
		100						105					110		
Lys	Asp	Phe	Leu	Ser	Val	Met	Leu	Glu	Lys	Gly	Ser	Leu	Ser	Ala	Met
	115						120					125			
Arg	Phe	Leu	Thr	Ala	Val	Asn	Leu	Glu	His	Pro	Glu	Met	Leu	Glu	Lys
	130					135					140				
Ala	Ser	Arg	Glu	Leu	Trp	Met	Arg	Val	Trp	Ser	Arg	Val	Ser	Val	Gly
145					150					155					160
Leu	Trp	Glu	Ser	Ser	Gly	Arg	Thr	Leu	Asp	Asp	Phe	Leu	Thr	Phe	Pro
				165					170					175	
Arg	His	Val	Phe	Arg	Val	Met	Ile	Leu	Pro	Pro	Gly	Gly	Ser	Thr	
		180					185					190			
Val	Leu	Pro	Val	Thr	Pro	Leu	Ser	Pro	His	Arg	Leu	Pro	Ala	Val	Phe
	195						200					205			
Ser	Ser	Ser	Gln	Asn	Glu	Asp	Ile	Thr	Glu	Pro	Gln	Ser	Ile	Leu	Ala
	210					215					220				
Ala	Ala	Glu	Lys	Ala	Gly	Met	Ser	Ala	Glu	Gln	Ala	Gln	Gly	Leu	Leu
225					230					235					240
Glu	Lys	Ile	Ala	Thr	Pro	Lys	Val	Lys	Asn	Gln	Leu	Lys	Glu	Thr	Thr
				245					250					255	
Glu	Ala	Ala	Cys	Arg	Tyr	Gly	Ala	Phe	Gly	Leu	Pro	Ile	Thr	Val	Ala
		260					265						270		
His	Val	Asp	Gly	Gln	Thr	His	Met	Leu	Phe	Gly	Ser	Asp	Arg	Met	Glu
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290

295

300

<210> 6125

<211> 468

<212> DNA

<213> Homo sapiens

<400> 6125

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<210> 6126

<211> 156

<212> PRT

<213> Homo sapiens

<400> 6126

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Asp	Lys	Lys	Lys	Met	Lys	Gln	Asp	Leu	Glu	Asp	Ala	Ser	Asn	Lys	Ala
			20					25					30		
Glu	Glu	Glu	Arg	Ala	Arg	Leu	Glu	Gly	Glu	Leu	Lys	Gly	Leu	Gln	Glu
			35				40					45			
Gln	Ile	Ala	Glu	Thr	Lys	Ala	Arg	Leu	Ile	Thr	Gln	Gln	His	Asp	Arg
			50				55				60				
Ala	Gln	Glu	Gln	Ser	Asp	His	Ala	Leu	Met	Leu	Arg	Glu	Leu	Gln	Lys
65					70					75				80	
Leu	Leu	Gln	Glu	Glu	Arg	Thr	Gln	Arg	Gln	Asp	Leu	Glu	Leu	Arg	Leu
			85					90						95	
Glu	Glu	Thr	Arg	Glu	Ala	Leu	Ala	Gly	Arg	Ala	Tyr	Ala	Ala	Glu	Gln
			100					105						110	
Met	Glu	Gly	Phe	Glu	Leu	Gln	Thr	Lys	Gln	Leu	Thr	Arg	Glu	Val	Glu
			115				120					125			
Glu	Leu	Lys	Ser	Glu	Leu	Gln	Ala	Ile	Arg	Asp	Glu	Lys	Asn	Gln	Pro
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<210> 6127

<211> 1900

<212> DNA

<213> Homo sapiens

<400> 6127

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<210> 6128

<211> 530

<212> PRT

<213> Homo sapiens

<400> 6128

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			20					25					30		
Ala	Ser	Leu	Ala	Asp	Arg	Ala	Ser	Arg	Ala	Arg	Asp	Ser	Asn	Met	Val
		35					40					45			
Arg	Ala	Ala	Ala	Glu	Leu	Ala	Leu	Ser	Cys	Leu	Pro	His	Ala	His	Ala
	50					55				60					
Leu	Asn	Pro	Asn	Glu	Ile	Gln	Arg	Ala	Leu	Val	Gln	Cys	Lys	Glu	Gln
65				70					75					80	
Asp	Asn	Leu	Met	Leu	Glu	Lys	Ala	Cys	Met	Ala	Val	Glu	Glu	Ala	Ala
			85						90					95	
Lys	Gly	Gly	Gly	Val	Tyr	Pro	Glu	Val	Leu	Phe	Glu	Val	Ala	His	Gln
			100					105					110		
Trp	Phe	Trp	Leu	Tyr	Glu	Gln	Thr	Ala	Gly	Gly	Ser	Ser	Thr	Ala	Arg
		115					120					125			
Glu	Gly	Ala	Thr	Ser	Cys	Ser	Ala	Ser	Gly	Ile	Arg	Ala	Gly	Gly	Glu
	130						135				140				
Ala	Gly	Arg	Gly	Met	Pro	Glu	Gly	Arg	Gly	Gly	Pro	Gly	Thr	Glu	Pro
145					150					155				160	
Val	Thr	Val	Ala	Ala	Ala	Ala	Val	Thr	Ala	Ala	Ala	Thr	Val	Val	Pro
			165						170					175	
Val	Ile	Ser	Val	Gly	Ser	Ser	Leu	Tyr	Pro	Gly	Pro	Gly	Leu	Gly	His
			180					185					190		
Gly	His	Ser	Pro	Gly	Leu	His	Pro	Tyr	Thr	Ala	Leu	Gln	Pro	His	Leu
		195					200					205			
Pro	Cys	Ser	Pro	Gln	Tyr	Leu	Thr	His	Pro	Ala	His	Pro	Ala	His	Pro
	210					215				220					
Met	Pro	His	Met	Pro	Arg	Pro	Ala	Val	Phe	Pro	Val	Pro	Ser	Ser	Ala
225					230					235				240	
Tyr	Pro	Gln	Gly	Val	His	Pro	Ala	Phe	Leu	Gly	Ala	Gln	Tyr	Pro	Tyr
			245						250				255		
Ser	Val	Thr	Pro	Pro	Ser	Leu	Ala	Ala	Thr	Ala	Val	Ser	Phe	Pro	Val

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 Ser Leu Pro Ala Leu Thr Thr Gln Pro Ser Pro Leu Val Ser Gly Gly
 325 330 335
 Phe Pro Pro Pro Glu Glu Glu Thr His Ser Gln Pro Val Asn Pro His
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 Ser Leu His His Leu His Ala Ala Tyr Arg Val Gly Met Leu Ala Leu
 355 360 365
 Glu Met Leu Gly Arg Arg Ala His Asn Asp His Pro Asn Asn Phe Ser
 370 375 380
 Arg Ser Pro Pro Tyr Thr Asp Asp Val Lys Trp Leu Leu Gly Leu Ala
 385 390 395 400
 Ala Lys Leu Gly Val Asn Tyr Val His Gln Phe Cys Val Gly Ala Ala
 405 410 415
 Lys Gly Val Leu Ser Pro Phe Val Leu Gln Glu Ile Val Met Glu Thr
 420 425 430
 Leu Gln Arg Leu Ser Pro Ala His Ala His Asn His Leu Arg Ala Pro
 435 440 445
 Ala Phe His Gln Leu Val Gln Arg Cys Gln Gln Ala Tyr Met Gln Tyr
 450 455 460
 Ile His His Arg Leu Ile His Leu Thr Pro Ala Asp Tyr Asp Asp Phe
 465 470 475 480
 Val Asn Ala Ile Arg Ser Ala Arg Ser Ala Phe Cys Leu Thr Pro Met
 485 490 495
 Gly Met Met Gln Phe Asn Asp Ile Leu Gln Asn Leu Lys Arg Ser Lys
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 Ser Pro
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<210> 6129

<211> 2012

<212> DNA

<213> Homo sapiens

<400> 6129

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<210> 6130

<211> 364

<212> PRT

<213> Homo sapiens

<400> 6130

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Arg Val Ala Leu Lys Leu Asp Gln Thr Phe Pro Phe Ser Leu Met Arg
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355

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<210> 6131

<211> 3526

<212> DNA

<213> Homo sapiens

<400> 6131

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<211> 167

<212> PRT

<213> Homo sapiens

<400> 6132

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<210> 6133

<211> 4156

<212> DNA

<213> Homo sapiens

<400> 6133

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<210> 6134

<211> 595

<212> PRT

<213> Homo sapiens

<400> 6134

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Arg	Gly	Leu	Val	Pro	Thr	Asp	Tyr	Val	Glu	Ile	Leu	Pro	Ser	Asp	Gly
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Asp	Ser	Leu	Ser	Ala	Ser	Thr	Ala	Gln	Ala	Ser	Ser	Ser	Ala	Ala	Ser
			85			90				95					
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Lys Gly Phe Leu Gly Cys Phe Pro Asp Ile Ile Gly Thr His Lys Gly		
500	505	510
Ala Ile Glu Lys Val Lys Glu Ser Asp Lys Leu Val Ala Thr Ser Lys		
515	520	525
Ile Thr Leu Gln Asp Lys Gln Asn Met Val Lys Arg Val Ser Ile Met		
530	535	540
Ser Tyr Ala Leu Gln Ala Glu Met Asn His Phe His Ser Asn Arg Ile		

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<212> DNA
<213> Homo sapiens
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180
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240
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300
accattctca accacagcct tttgctggaa cagctggaag tttactctcc catctcttga
360
gtttagagca tgtaggaatt ttgcataagg attttgaatc tattttacca accaggaaga
420
atcataatat ggcttcaagg ccattaactt ttacacctca accatatgtg acctcaccag
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526
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<212> PRT
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Glu Ser Thr Trp Met Gln Pro Glu Arg Leu Ser Pro Gln Val His His
      20             25             30
Ser Gln Pro Gln Pro Phe Ala Gly Thr Ala Gly Ser Leu Leu Ser His
      35             40             45
Leu Leu Ser Leu Glu His Val Gly Ile Leu His Lys Asp Phe Glu Ser
      50             55             60
Ile Leu Pro Thr Arg Lys Asn His Asn Met Ala Ser Arg Pro Leu Thr
 65             70             75             80
Phe Thr Pro Gln Pro Tyr Val Thr Ser Pro Ala Ala Tyr Thr Asp Ala
      85             90             95
Leu Val Lys Pro Ser Ala Ser Gln Tyr
      100             105

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<212> DNA
<213> Homo sapiens

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240
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420
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480
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<211> 550

<212> PRT

<213> Homo sapiens

<400> 6138

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			20					25					30		
Arg	Lys	Glu	Ala	Lys	Lys	Gln	Gly	His	Lys	Lys	Pro	Arg	Lys	Asp	Pro
		35					40					45			
Gly	Val	Pro	Asn	Ser	Ala	Pro	Phe	Lys	Glu	Ala	Leu	Leu	Arg	Glu	Ala
	50					55					60				
Glu	Leu	Arg	Lys	Gln	Arg	Leu	Glu	Glu	Leu	Lys	Gln	Gln	Gln	Lys	Leu
65					70					75				80	
Asp	Arg	Gln	Lys	Glu	Leu	Glu	Lys	Lys	Arg	Lys	Leu	Glu	Thr	Asn	Pro
			85						90					95	
Asp	Ile	Lys	Xaa	Ile	Lys	Cys	Gly	Thr	Xaa	Met	Glu	Lys	Glu	Phe	Gly
		100						105					110		
Leu	Cys	Lys	Thr	Glu	Asn	Lys	Ala	Lys	Ser	Gly	Lys	Gln	Asn	Ser	Lys
		115					120					125			
Lys	Leu	Tyr	Cys	Gln	Glu	Leu	Lys	Lys	Val	Ile	Glu	Ala	Ser	Asp	Val
	130					135					140				
Val	Leu	Glu	Val	Leu	Asp	Ala	Arg	Asp	Pro	Leu	Gly	Cys	Arg	Cys	Pro
145					150					155				160	
Gln	Val	Glu	Glu	Ala	Ile	Val	Gln	Ser	Gly	Gln	Lys	Lys	Leu	Val	Leu
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Ile	Leu	Asn	Lys	Ser	Asp	Leu	Val	Pro	Lys	Glu	Asn	Leu	Glu	Ser	Trp
		180						185					190		
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Lys	Asn	Ala	Ala	Pro	Phe	Arg	Ser	Glu	Val	Cys	Phe	Gly	Lys	Glu	Gly			
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Arg	Val	Gly	Val	Ile	Gly	Phe	Pro	Asn	Val	Gly	Lys	Ser	Ser	Ile	Ile			
			260					265					270					
Asn	Ser	Leu	Lys	Gln	Glu	Gln	Met	Cys	Asn	Val	Gly	Val	Ser	Met	Gly			
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				325					330					335				
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Leu	Glu	Lys	Asn	Asn	Ala	Gln	Ser	Ile	Arg	Ala	Ile	Lys	Gly	Pro	His			
		435					440					445						
Leu	Ala	Asn	Ser	Ile	Leu	Phe	Gln	Ser	Ser	Gly	Leu	Thr	Asn	Gly	Ile			
	450					455					460							
Ile	Glu	Glu	Lys	Asp	Ile	His	Glu	Glu	Leu	Pro	Lys	Arg	Lys	Glu	Arg			
465					470					475					480			
Lys	Gln	Glu	Glu	Arg	Glu	Asp	Asp	Lys	Asp	Ser	Asp	Gln	Glu	Thr	Val			
				485					490					495				
Asp	Glu	Glu	Val	Asp	Glu	Asn	Ser	Ser	Gly	Met	Phe	Ala	Ala	Glu	Glu			
			500					505					510					
Thr	Gly	Glu	Ala	Leu	Ser	Glu	Glu	Thr	Thr	Ala	Gly	Glu	Gln	Ser	Thr			
		515					520					525						
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<210> 6139

<211> 2249

<212> DNA

<213> Homo sapiens

<400> 6139

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<211> 381

<212> PRT

<213> Homo sapiens

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			20					25					30		
Leu	Leu	Leu	Gly	Val	Leu	His	Pro	Asn	Thr	Lys	Leu	Arg	Gln	Ala	Glu
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Arg	Leu	Phe	Glu	Asn	Gln	Leu	Val	Gly	Pro	Glu	Ser	Ile	Ala	His	Ile
	50					55					60				
Gly	Asp	Val	Met	Phe	Thr	Gly	Thr	Ala	Asp	Gly	Arg	Val	Val	Lys	Leu
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Glu	Asn	Gly	Glu	Ile	Glu	Thr	Ile	Ala	Arg	Phe	Xaa	Phe	Gly	Pro	Xaa
				85					90					95	
Cys	Lys	Thr	Arg	Asp	Asp	Glu	Pro	Val	Cys	Gly	Arg	Pro	Leu	Gly	Ile
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Ser	Glu	Thr	Pro	Ile	Glu	Gly	Lys	Asn	Met	Ser	Phe	Val	Asn	Asp	Leu
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			165					170						175	
Lys	Trp	Gln	Arg	Arg	Asp	Tyr	Leu	Leu	Leu	Val	Met	Glu	Gly	Thr	Asp
			180				185					190			
Asp	Gly	Arg	Leu	Leu	Glu	Tyr	Asp	Thr	Val	Thr	Arg	Glu	Val	Lys	Val
	195						200					205			
Leu	Leu	Asp	Gln	Leu	Arg	Phe	Pro	Asn	Gly	Val	Gln	Leu	Ser	Pro	Ala

210	215	220
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225	230	235
Val Tyr Val Ser Gly Leu Met Lys Gly Gly Ala Asp Leu Phe Val Glu		240
	245	250
Asn Met Pro Gly Phe Pro Asp Asn Ile Arg Pro Ser Ser Ser Gly Gly		255
	260	265
Tyr Trp Val Gly Met Ser Thr Ile Arg Pro Asn Pro Gly Phe Ser Met		270
	275	280
Leu Asp Phe Leu Ser Glu Arg Pro Trp Ile Lys Arg Met Ile Phe Lys		285
	290	295
Gly Ser Cys Ala Gly Cys Asp Leu Leu Phe Ser Gln Glu Thr Val Met		300
305	310	315
Lys Phe Val Pro Arg Tyr Ser Leu Val Leu Glu Leu Ser Asp Ser Gly		320
	325	330
Ala Phe Arg Arg Ser Leu His Asp Pro Asp Gly Leu Val Ala Thr Tyr		335
	340	345
Ile Ser Glu Val His Glu His Asp Gly His Leu Tyr Leu Gly Ser Phe		350
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Arg Ser Pro Phe Leu Cys Arg Leu Ser Leu Gln Ala Val		365
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<210> 6141
 <211> 5651
 <212> DNA
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2580
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<211> 513
<212> PRT
<213> Homo sapiens

<400> 6142

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Trp	Pro	His	Glu	Ala	Ala	Ser	Ser	Ser	Gln	Arg	Arg	Gln	Pro	Pro	Pro
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Tyr	Asp	Lys	Gln	Pro	Phe	Met	Val	Ala	Phe	Phe	Lys	Val	Ser	Glu	Val

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 Pro Lys Gly Tyr Ala Ala Asn Tyr Cys Asp Gly Glu Cys Ser Phe Pro
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 Val His Leu Met Asn Pro Glu Tyr Val Pro Lys Pro Cys Cys Ala Pro
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<210> 6143

<211> 1137

<212> DNA

<213> Homo sapiens

<400> 6143

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 Ala Gly Pro Glu Leu Gly Gly Gln Gly Ile Pro Ser Pro Gly Cys Ala
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 Cys Gln Arg Gly Glu Ala Gly Gly Gly Gly Asn Ala Val Leu Pro Gln
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 Gly Ala Leu Thr Arg Ser Gly Ser Gly Ala Ala Ser Ala Leu Val Arg
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<211> 100

<212> PRT

<213> Homo sapiens

<400> 6146

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		35				40				45					
Gln	Pro	Pro	Pro	Val	Lys	Cys	Gln	Glu	Thr	Cys	Ala	Pro	Lys	Thr	Lys
	50				55					60					
Asp	Pro	Cys	Ala	Pro	Gln	Val	Lys	Lys	Gln	Cys	Pro	Pro	Lys	Asp	Thr
65					70					75				80	
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<210> 6147

<211> 1852

<212> DNA

<213> Homo sapiens

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<210> 6148

<211> 410

<212> PRT

<213> Homo sapiens

<400> 6148

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Phe Asn Leu Asp Ile Arg Arg Ala Ile Gln Ile Leu Asn Glu Gly Ala
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Ser Ser Glu Lys Gly Asp Leu Asn Leu Asn Val Val Ala Met Ala Leu
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Glu Ala Gly Asn Leu Glu Gly Ile Leu Leu Thr Gly Leu Thr Lys Asp
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Lys Leu Asp Pro Ser Ser Lys Pro Leu Ala Gln Val Phe Val Ser Cys
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Ser Lys Val Thr Ser Cys Pro Gly Cys Arg Lys Pro Leu Pro Arg Cys
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Ala Leu Cys Leu Ile Asn Met Gly Thr Pro Val Ser Ser Cys Pro Gly
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Gly His Ala Gly His Met Leu Ser Trp Phe Arg Asp His Ala Glu Cys
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<210> 6149
 <211> 1949
 <212> DNA
 <213> Homo sapiens

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<210> 6150

<211> 508

<212> PRT

<213> Homo sapiens

<400> 6150

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Ile	Arg	Gly	Asp	Ala	Arg	Arg	Ile	Lys	Glu	Leu	Ile	Ser	Glu	Gly	Ala
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Ser	Glu	Phe	Glu	Lys	Gly	Leu	Lys	His	Lys	Ala	Lys	Asn	Pro	Glu	Pro
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Gln	Lys	Ala	Thr	Ala	Pro	Val	Lys	Asp	Glu	Tyr	Glu	Phe	Asp	Glu	Asp
			340				345					350			
Asp	Glu	Gln	Asp	Arg	Val	Pro	Pro	Val	Asp	Asp	Lys	His	Leu	Leu	Lys
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Lys	Asp	Tyr	Arg	Lys	Glu	Thr	Lys	Ser	Asn	Ser	Phe	Ile	Ser	Ile	Pro
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Lys	Glu	Lys	Asn	Lys	Val	Lys	Lys	Lys	Arg	Lys	Lys	Glu	Thr	Lys	Gly
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<210> 6151

<211> 648

<212> DNA

<213> Homo sapiens

<400> 6151

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240

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<210> 6152

<211> 130

<212> PRT

<213> Homo sapiens

<400> 6152

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<210> 6153

<211> 1810

<212> DNA

<213> Homo sapiens

<400> 6153

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240

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<210> 6154

<211> 388

<212> PRT

<213> Homo sapiens

<400> 6154

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Ser Arg Ala Tyr Arg Phe Thr Gly His Lys Asp Ala Val Thr Cys Val
          35          40          45
Asn Phe Ser Pro Ser Gly His Leu Leu Ala Ser Gly Ser Arg Asp Lys
          50          55          60
Thr Val Arg Ile Trp Val Pro Asn Val Lys Gly Glu Ser Thr Val Phe
65          70          75          80
Arg Ala His Thr Ala Thr Val Arg Ser Val His Phe Cys Ser Asp Gly
          85          90          95
Gln Ser Phe Val Thr Ala Ser Asp Asp Lys Thr Val Lys Val Trp Ala
          100          105          110
Thr His Arg Gln Lys Phe Leu Phe Ser Leu Ser Gln His Ile Asn Trp
          115          120          125
Val Arg Cys Ala Lys Phe Ser Pro Asp Gly Arg Leu Ile Val Ser Ala
          130          135          140
Ser Asp Asp Lys Thr Val Lys Leu Trp Asp Lys Ser Ser Arg Glu Cys
145          150          155          160
Val His Ser Tyr Cys Glu His Gly Gly Phe Val Thr Tyr Val Asp Phe
          165          170          175
His Pro Ser Gly Thr Cys Ile Ala Ala Ala Gly Met Asp Asn Thr Val
          180          185          190
Lys Val Trp Asp Val Arg Thr His Arg Leu Leu Gln His Tyr Gln Leu
          195          200          205
His Ser Ala Ala Val Asn Gly Leu Ser Phe His Pro Ser Gly Asn Tyr
          210          215          220
Leu Ile Thr Ala Ser Ser Asp Ser Thr Leu Lys Ile Leu Asp Leu Met
225          230          235          240
Glu Gly Arg Leu Leu Tyr Thr Leu His Gly His Gln Gly Pro Ala Thr
          245          250          255
Thr Val Ala Phe Ser Arg Thr Gly Glu Tyr Phe Ala Ser Gly Gly Ser
          260          265          270
Asp Glu Gln Val Met Val Trp Lys Ser Asn Phe Asp Ile Val Asp His
          275          280          285
Gly Glu Val Thr Lys Val Pro Arg Pro Pro Ala Thr Leu Ala Ser Ser
          290          295          300
Met Gly Asn Leu Pro Glu Val Asp Phe Pro Val Pro Pro Gly Arg Gly
305          310          315          320
Trp Ser Val Glu Ser Val Gln Ser Gln Pro Gln Glu Pro Val Ser Val
          325          330          335
Pro Gln Thr Leu Thr Ser Thr Leu Glu His Ile Val Gly Gln Leu Asp
          340          345          350
Val Leu Thr Gln Thr Val Ser Ile Leu Glu Gln Arg Leu Thr Leu Thr
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375

380

<210> 6155

<211> 995

<212> DNA

<213> Homo sapiens

<400> 6155

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180
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360
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900
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<210> 6156

<211> 164

<212> PRT

<213> Homo sapiens

<400> 6156

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		35					40					45			
Met	Thr	Leu	Ala	Asp	Gly	Arg	Val	Val	Leu	Ala	Leu	Glu	Gly	Gly	His
	50					55					60				
Asp	Leu	Thr	Ala	Ile	Cys	Asp	Ala	Ser	Glu	Ala	Cys	Val	Asn	Ala	Leu
65					70					75					80
Leu	Gly	Asn	Glu	Leu	Glu	Pro	Leu	Ala	Glu	Asp	Ile	Leu	His	Gln	Ser
			85						90					95	
Pro	Asn	Met	Asn	Ala	Val	Ile	Ser	Leu	Gln	Lys	Ile	Ile	Glu	Ile	Gln
			100						105				110		
Lys	Leu	Leu	Val	Ser	Leu	Trp	Lys	Arg	Ser	Gln	Pro	Cys	Glu	Val	Pro
		115					120					125			
Ser	Pro	Pro	Leu	Ile	Phe	Pro	Val	Cys	Asp	Ile	Ile	Val	Tyr	Pro	Pro
	130					135					140				
Thr	Pro	Val	Pro	Ser	Asp	Met	Ser	Cys	Leu	Leu	Pro	Gly	Trp	His	Arg
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<211> 2135
<212> DNA
<213> Homo sapiens
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780
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840

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<210> 6158

<211> 455

<212> PRT

<213> Homo sapiens

<400> 6158

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Asp	Phe	Gly	Ala	Val	Arg	Val	Gly	Arg	Ala	Val	Ala	Thr	Thr	Ala	Val	
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Ile	Ser	Tyr	Asp	Tyr	Leu	Thr	Ser	Leu	Lys	Ser	Val	Pro	Tyr	Gly	Ser	
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65					70					75					80	
Phe	Asp	Asp	Thr	Pro	Leu	Gly	Thr	Ala	Ser	Leu	Ala	Gln	Val	His	Lys	
				85				90						95		
Ala	Val	Leu	His	Asp	Gly	Arg	Thr	Val	Ala	Val	Lys	Val	Gln	His	Pro	
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Lys	Val	Arg	Ala	Gln	Ser	Ser	Lys	Asp	Ile	Leu	Leu	Met	Glu	Val	Leu	
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			340					345					350			
Leu	Asn	His	Val	Pro	Arg	Gln	Met	Leu	Leu	Ile	Leu	Lys	Thr	Asn	Asp	
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<211> 4310

<212> DNA

<213> Homo sapiens

<400> 6159

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<211> 551

<212> PRT

<213> Homo sapiens

<400> 6160

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Gly	Thr	Tyr	Gln	Arg	Ala	Ile	Leu	Gln	Asn	His	Thr	Asp	Phe	Lys	Asp		
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Ala	Lys	Glu	Gly	Asp	Leu	His	Arg	Ile	Glu	Ile	Pro	Phe	Lys	Phe	His		
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	485	490
Ile Met Ser Thr Gly Ile Val Gln Gly Ser Ser Gly Ala Gln Gly Ser		495
	500	505
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<210> 6161

<211> 1489

<212> DNA

<213> Homo sapiens

<400> 6161

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1020

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 <211> 58
 <212> PRT
 <213> Homo sapiens

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<211> 120

<212> PRT

<213> Homo sapiens

<400> 6164

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			20					25					30		
Pro	Leu	Pro	Gly	Lys	Ala	Gly	Leu	Ala	Leu	Leu	Lys	Pro	Gln	Ser	Arg
			35				40					45			
Ser	Asp	Gly	Tyr	Arg	Tyr	Leu	Gly	Lys	Asp	Thr	Val	Asp	Gly	Leu	Asp
	50					55				60					
Ser	Ser	Leu	Leu	Lys	Cys	Thr	Arg	Arg	Cys	Met	Arg	Gly	Phe	Arg	Leu
65					70				75					80	
Pro	Glu	Lys	Gln	Pro	Ser	Lys	Thr	Arg	Val	Ser	Phe	Leu	Glu	Ser	Lys
			85					90					95		
Arg	Lys	Glu	Gly	Ser	Gly	Trp	Leu	His	Trp	Ser	Val	Thr	Arg	Ser	Gly
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Ala	Phe	Arg	Leu	Lys	Val	Thr	Val								
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<210> 6165

<211> 1004

<212> DNA

<213> Homo sapiens

<400> 6165

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<210> 6166

<211> 239

<212> PRT

<213> Homo sapiens

<400> 6166

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Gly	Gly	Pro	Thr	Pro	Gln	Glu	Ala	Ile	Gln	Arg	Leu	Arg	Asp	Thr	Glu
		35					40					45			
Glu	Met	Leu	Ser	Lys	Lys	Gln	Glu	Phe	Leu	Glu	Lys	Lys	Ile	Glu	Gln
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Glu	Leu	Thr	Ala	Ala	Lys	Lys	His	Gly	Thr	Lys	Asn	Lys	Arg	Ala	Ala
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Leu	Gln	Ala	Leu	Lys	Arg	Lys	Lys	Arg	Tyr	Glu	Lys	Gln	Leu	Ala	Gln
				85				90						95	
Ile	Asp	Gly	Thr	Leu	Ser	Thr	Ile	Glu	Phe	Gln	Arg	Glu	Ala	Leu	Glu
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Lys	Ala	Met	Lys	Ala	Ala	His	Asp	Asn	Met	Asp	Ile	Asp	Lys	Val	Asp
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Ser	Thr	Ala	Ile	Ser	Lys	Pro	Val	Gly	Phe	Gly	Glu	Glu	Phe	Asp	Glu
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Asp	Glu	Leu	Met	Ala	Glu	Leu	Glu	Glu	Leu	Glu	Gln	Glu	Glu	Leu	Asp
			180					185					190		
Lys	Asn	Leu	Leu	Glu	Ile	Ser	Gly	Pro	Glu	Thr	Val	Pro	Leu	Pro	Asn
		195						200					205		
Val	Pro	Ser	Ile	Ala	Leu	Pro	Ser	Lys	Pro	Ala	Lys	Lys	Lys	Glu	Glu
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230

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<210> 6167

<211> 1220

<212> DNA

<213> Homo sapiens

<400> 6167

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480

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540

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600

gtctgccctt tttatctccc cgcaaggccc ccagtcttct agggaaagcca gtcagtgaag
660

cgcggaggtc cgggcgcgcc gagagagagt ccagtctttg aggaccgagt agtcttgggc
720

cacctcccgc ctctgctgtc agaagcagca gctgccgccg tggaatccaa aatttcggga
780

gctgtgacct tttctcatg taaaacgagt agtcttggac gatctgggca taggaaccaa
840

tcagaaacaa tcgcttcagc aatcaagacc attgttcac atggagggaac ccattggatac
900

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960

atttgacag tatccatcga tgcagatgaa ccacatccag gcaactggga agtggaggac
1020

atagaacagc tcaatcagtg tttgatccaa cacttccatc tcattaagac aagtttgatt
1080

tttctttgct ttttatttca tggaatacat gagaatctct taactgttgg agtttccaag
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1220

<210> 6168

<211> 90

<212> PRT

<213> Homo sapiens

<400> 6168

Ala	Lys	Trp	Gln	Ile	Trp	Thr	Val	Ser	Ile	Asp	Ala	Asp	Glu	Pro	His
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Pro	Gly	Thr	Gly	Glu	Val	Glu	Asp	Ile	Glu	Gln	Leu	Asn	Gln	Cys	Leu
		20					25					30			
Ile	Gln	His	Phe	His	Leu	Ile	Lys	Thr	Ser	Leu	Ile	Phe	Leu	Cys	Phe
		35					40				45				
Leu	Phe	His	Gly	Ile	His	Glu	Asn	Leu	Leu	Thr	Val	Gly	Val	Ser	Lys
	50					55				60					
Glu	Ala	Tyr	Leu	Met	Thr	Ser	Val	Asn	Gly	Lys	Asn	Lys	Thr	Lys	Met
65				70					75						80
Leu	Tyr	Gly	Gln	Ser	His	Lys	Gly	Lys	Asp						
			85					90							

<210> 6169

<211> 720

<212> DNA

<213> Homo sapiens

<400> 6169

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120
cagtgacccc aggcttttta tggctgtgaa acacgttaaa atttcagggt aagacgtgac
180
cttttgaggt gactataact gaagattgct ttacagaagc caaaaaagg tttttgagtc
240
atgatgcaag aatctgggac tgagacaaaa agtaacgggt cagccatcca gaatgggtcg
300
ggcggcagca accacttact agagtgcggc ggtcttcggg aggggcggtc caacggagag
360
acgccggccg tggacatcgg ggcagctgac ctgcgccacg cccagcagca gcagcaacag
420
tggcatctca taaaccatca gccctctagg agtcccagca gttggcttaa gagactaatt
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540
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600
gagaaatggt tcccactgct ttcattgcaa aataaaaatt aaacgaaaaa cagcttaagc
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<210> 6170

<211> 101

<212> PRT

<213> Homo sapiens

<400> 6170

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		20		25		30
Arg	Glu	Gly	Arg	Ser	Asn	Gly
		35		40		45
Ala	Asp	Leu	Ala	His	Ala	Gln
		50		55		60
Asn	His	Gln	Pro	Ser	Arg	Ser
		65		70		75
Ser	Ser	Pro	Trp	Glu	Leu	Glu
		85		90		95
Leu	Leu	Arg	Arg	Arg		
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<210> 6171

<211> 1130

<212> DNA

<213> Homo sapiens

<400> 6171

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120
tatgaggtga acccacggac cacagagatt ttacatcacc tttcagaacg caacagggtc
180
cgggacaggg atgtctacct ggtaatagag gacttgaagc agaaagcaag tgaatacgag
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420
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480
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gcaaagtcag aggaattcag atttggaaac aaggetgcag aggagcaact ttcagccaga
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1020

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 1130

<210> 6172
 <211> 292
 <212> PRT
 <213> Homo sapiens

<400> 6172
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 20 25 30
 Phe Gly Asp His Pro Ile Pro Gln Tyr Glu Val Asn Pro Arg Thr Thr
 35 40 45
 Glu Ile Leu His His Leu Ser Glu Arg Asn Arg Val Arg Asp Arg Asp
 50 55 60
 Val Tyr Leu Val Ile Glu Asp Leu Lys Gln Lys Ala Ser Glu Tyr Glu
 65 70 75 80
 Ser Glu Ala Lys Tyr Leu Gln Asp Leu Leu Met Glu Ser Val Asn Phe
 85 90 95
 Ser Pro Ala Asn Leu Ser Ser Thr Gly Ser Arg Tyr Leu Asn Ala Leu
 100 105 110
 Val Asp Ser Ala Val Ala Leu Glu Thr Lys Asp Thr Ser Leu Ala Ser
 115 120 125
 Phe Ile Pro Ala Val Asn Asp Leu Thr Ser Asp Leu Phe Arg Thr Lys
 130 135 140
 Ser Lys Ser Glu Glu Ile Lys Ile Glu Leu Glu Lys Leu Glu Lys Asn
 145 150 155 160
 Leu Thr Ala Thr Leu Val Leu Glu Lys Cys Leu Gln Glu Asp Val Lys
 165 170 175
 Lys Ala Glu Leu His Leu Ser Thr Glu Arg Ala Lys Val Asp Asn Arg
 180 185 190
 Arg Gln Asn Met Asp Phe Leu Lys Ala Lys Ser Glu Glu Phe Arg Phe
 195 200 205
 Gly Ile Lys Ala Ala Glu Glu Gln Leu Ser Ala Arg Gly Met Asp Ala
 210 215 220
 Ser Leu Ser His Gln Ser Leu Val Ala Leu Ser Glu Lys Leu Ala Arg
 225 230 235 240
 Leu Lys Gln Gln Thr Ile Pro Leu Lys Lys Lys Leu Glu Ser Tyr Leu
 245 250 255
 Asp Leu Met Pro Asn Pro Ser Leu Ala Gln Val Lys Ile Glu Glu Ala
 260 265 270
 Lys Arg Glu Leu Asp Ser Ile Glu Ala Glu Leu Thr Arg Arg Val Asp
 275 280 285
 Met Met Glu Leu
 290

<210> 6173
 <211> 1483
 <212> DNA
 <213> Homo sapiens

<400> 6173

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120
caaggcctgt tgatgcagcc atgggcgtgg ctacagcttg cagagaactc cctcttggcc
180
aagggttttta tcaccaagca gggctatgcc ttgttggttt cagatcttca acagggtgtgg
240
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300
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360
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420
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480
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720
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<210> 6174

<211> 299
 <212> PRT
 <213> Homo sapiens

<400> 6174

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      20           25           30
Gly Tyr Ala Leu Leu Val Ser Asp Leu Gln Gln Val Trp His Glu Gln
      35           40           45
Val Asp Thr Ser Val Val Ser Gln Arg Ala Lys Glu Leu Asn Lys Arg
      50           55           60
Leu Thr Ala Pro Pro Ala Ala Phe Leu Cys His Leu Asp Asn Leu Leu
65           70           75           80
Arg Pro Leu Leu Lys Asp Ala Ala His Pro Ser Glu Ala Thr Phe Ser
      85           90           95
Cys Asp Cys Val Ala Asp Ala Leu Ile Leu Arg Val Arg Ser Glu Leu
      100          105          110
Ser Gly Leu Pro Phe Tyr Trp Asn Phe His Cys Met Leu Ala Ser Pro
      115          120          125
Ser Leu Val Ser Gln His Leu Ile Arg Pro Leu Met Gly Met Ser Leu
      130          135          140
Ala Leu Gln Cys Gln Val Arg Glu Leu Ala Thr Leu Leu His Met Lys
145          150          155          160
Asp Leu Glu Ile Gln Asp Tyr Gln Glu Ser Gly Ala Thr Leu Ile Arg
      165          170          175
Asp Arg Leu Lys Thr Glu Pro Phe Glu Glu Asn Ser Phe Leu Glu Gln
      180          185          190
Phe Met Ile Glu Lys Leu Pro Glu Ala Cys Ser Ile Gly Asp Gly Lys
      195          200          205
Pro Phe Val Met Asn Leu Gln Asp Leu Tyr Met Ala Val Thr Thr Gln
      210          215          220
Glu Val Gln Val Gly Gln Lys His Gln Gly Ala Gly Asp Pro His Thr
225          230          235          240
Ser Asn Ser Ala Ser Leu Gln Gly Ile Asp Ser Gln Cys Val Asn Gln
      245          250          255
Pro Glu Gln Leu Val Ser Ser Ala Pro Thr Leu Ser Ala Pro Glu Lys
      260          265          270
Glu Ser Thr Gly Thr Ser Gly Pro Leu Gln Arg Pro Gln Leu Ser Lys
      275          280          285
Val Lys Arg Lys Asn Pro Arg Gly Leu Phe Ser
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<210> 6175
 <211> 349
 <212> DNA
 <213> Homo sapiens

<400> 6175

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120

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aaaactgttc agtttggtgg aactgtgaca gaagtcttgc tgaagtacaa aaaggggtgaa
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 240
 tggttgaata gaagtcaaac agtagtgga gagtatttgg cttttcttgg taatcttgta
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 349

<210> 6176

<211> 90

<212> PRT

<213> Homo sapiens

<400> 6176

Met	Arg	Ala	Leu	Glu	Asn	Asp	Phe	Phe	Asn	Ser	Pro	Pro	Arg	Lys	Thr
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Val	Gln	Phe	Gly	Gly	Thr	Val	Thr	Glu	Val	Leu	Leu	Lys	Tyr	Lys	Lys
			20					25					30		
Gly	Glu	Thr	Asn	Asp	Phe	Glu	Leu	Leu	Lys	Asn	Gln	Leu	Leu	Asp	Pro
			35				40					45			
Asp	Ile	Lys	Arg	Leu	Pro	Trp	Leu	Asn	Arg	Ser	Gln	Thr	Val	Val	Glu
	50					55				60					
Glu	Tyr	Leu	Ala	Phe	Leu	Gly	Asn	Leu	Val	Ser	Ala	Gln	Thr	Val	Phe
65					70					75					80
Leu	Arg	Pro	Cys	Leu	Ser	Met	Ile	Ala	Ser						
				85					90						

<210> 6177

<211> 1536

<212> DNA

<213> Homo sapiens

<400> 6177

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<210> 6178

<211> 310

<212> PRT

<213> Homo sapiens

<400> 6178

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 Arg Asn Ala Leu Glu Asn Ile Arg Lys Glu Met Lys Leu Leu Glu Gln
 35 40 45
 Ala Gly Ser Leu Lys Gly Ser Leu Ser Val Glu Glu Gln Leu Ser Leu
 50 55 60
 Ile Ser Gly Cys Pro Asn Ile Gln Glu Ala Val Glu Gly Ala Met His
 65 70 75 80
 Ile Gln Glu Cys Val Pro Glu Asp Leu Glu Leu Lys Lys Lys Ile Phe
 85 90 95
 Ala Gln Leu Asp Ser Ile Ile Asp Asp Arg Val Ile Leu Ser Ser Ser
 100 105 110
 Thr Ser Cys Leu Met Pro Ser Lys Leu Phe Ala Gly Leu Val His Val

115	120	125
Lys Gln Cys Ile Val Ala His Pro Val Asn Pro Pro Tyr Tyr Ile Pro		
130	135	140
Leu Val Glu Leu Val Pro His Pro Glu Thr Ala Pro Thr Thr Val Asp		
145	150	155
Arg Thr His Ala Leu Met Lys Lys Ile Gly Xaa Val Pro His Ala Ser		
165	170	175
Pro Glu Gly Gly Gly Arg Leu Arg Ser Glu Pro Pro Ala Ile Cys Asn		
180	185	190
His Gln Arg Gly Leu Ala Ala Ser Gly Gly Arg Asn Xaa Cys Leu Leu		
195	200	205
Val Thr Trp Xaa Leu Val Met Ser Glu Gly Leu Gly Met Arg Tyr Ala		
210	215	220
Phe Ile Gly Pro Leu Glu Thr Met His Leu Asn Ala Glu Gly Met Leu		
225	230	235
Ser Tyr Cys Asp Arg Tyr Ser Glu Gly Ile Lys His Val Leu Gln Thr		
245	250	255
Phe Gly Pro Ile Pro Glu Phe Ser Arg Ala Thr Ala Glu Lys Val Asn		
260	265	270
Gln Asp Met Cys Met Lys Val Pro Asp Asp Pro Glu His Leu Ala Ala		
275	280	285
Arg Arg Gln Trp Arg Asp Glu Cys Leu Met Arg Leu Ala Lys Leu Lys		
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Ser Gln Val Gln Pro Gln		
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<210> 6179

<211> 2940

<212> DNA

<213> Homo sapiens

<400> 6179

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660

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 2640
 cttggtaagt gttcaagtct ttctgatcac cccaagtagc atgactgac tgcaattttt
 2700
 agagcttttt ttaggcactc cattaccctc ttgcctcctg gaagctctc cccatttttg
 2760
 tccgtgtttc tgccagacca gaagagatgt gcacaggtgc tcacagctcg gccctgatca
 2820
 ggtttcttta gaagtttga tgacgaagg gcacactgag tcctcagagg ttcattgattc
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 2940

<210> 6180

<211> 751

<212> PRT

<213> Homo sapiens

<400> 6180

Met	Leu	Leu	Ile	Cys	Leu	Val	Asn	Ser	Gly	Leu	Leu	Cys	Tyr	His	Gln
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Arg	Val	Thr	Met	Asn	Phe	Ile	Trp	Pro	Phe	Leu	Met	Asn	Cys	Thr	Thr
			20					25					30		
Trp	Arg	Xaa	Tyr	Leu	Thr	Asp	Glu	Phe	Ala	Lys	Gly	Arg	Lys	Val	Ala
		35					40					45			
Asp	Leu	Tyr	Glu	Leu	Val	Gln	Tyr	Ala	Gly	Asn	Ile	Ile	Pro	Arg	Leu
	50					55					60				
Tyr	Leu	Leu	Ile	Thr	Val	Gly	Val	Val	Tyr	Val	Lys	Ser	Phe	Pro	Gln
65					70					75				80	
Ser	Arg	Lys	Asp	Ile	Leu	Lys	Asp	Leu	Val	Glu	Met	Cys	Arg	Gly	Val
				85					90					95	
Gln	His	Pro	Leu	Arg	Gly	Leu	Phe	Leu	Arg	Asn	Tyr	Leu	Leu	Gln	Cys
			100					105					110		
Thr	Arg	Asn	Ile	Leu	Pro	Asp	Glu	Gly	Glu	Pro	Thr	Asp	Glu	Glu	Thr
		115					120					125			
Thr	Gly	Asp	Ile	Ser	Asp	Ser	Met	Asp	Phe	Val	Leu	Leu	Asn	Phe	Ala
		130				135					140				
Glu	Met	Asn	Lys	Leu	Trp	Val	Arg	Met	Gln	His	Gln	Gly	His	Ser	Arg
145				150					155					160	
Asp	Arg	Glu	Lys	Arg	Glu	Arg	Glu	Arg	Gln	Glu	Leu	Arg	Ile	Leu	Val
			165					170					175		
Gly	Thr	Asn	Leu	Val	Arg	Leu	Ser	Xaa	Ser	Trp	Arg	Cys	Lys	Cys	Gly
		180					185					190			
Thr	Leu	Gln	Gln	Ile	Val	Leu	Thr	Gly	Ile	Leu	Glu	Gln	Val	Val	Asn

195	200	205
Cys Arg Asp Ala Leu Ala Gln Glu Tyr Leu Met Glu Cys Ile Ile Gln		
210	215	220
Val Phe Pro Asp Glu Phe His Leu Gln Thr Leu Asn Pro Phe Leu Arg		
225	230	235
Ala Cys Ala Glu Leu His Gln Asn Val Asn Val Lys Asn Ile Ile Ile		240
	245	250
Ala Leu Ile Asp Arg Leu Ala Leu Phe Ala His Arg Glu Asp Gly Pro		255
	260	265
Gly Ile Pro Ala Asp Ile Lys Leu Phe Asp Ile Phe Ser Gln Gln Val		270
	275	280
Ala Thr Val Ile Gln Ser Arg Gln Asp Met Pro Ser Glu Asp Val Val		285
	290	295
Ser Leu Gln Val Ser Leu Ile Asn Leu Ala Met Lys Cys Tyr Pro Asp		300
305	310	315
Arg Val Asp Tyr Val Asp Lys Val Leu Glu Thr Thr Val Glu Ile Phe		320
	325	330
Asn Lys Leu Asn Leu Glu His Ile Ala Thr Ser Ser Ala Val Ser Lys		335
	340	345
Glu Leu Thr Arg Leu Leu Lys Ile Pro Val Asp Thr Tyr Asn Asn Ile		350
	355	360
Leu Thr Val Leu Lys Leu Lys His Phe His Pro Leu Phe Glu Tyr Phe		365
	370	375
Asp Tyr Glu Ser Arg Lys Ser Met Ser Cys Tyr Val Leu Ser Asn Val		380
385	390	395
Leu Asp Tyr Asn Thr Glu Ile Val Ser Gln Asp Gln Val Asp Ser Ile		400
	405	410
Met Asn Leu Val Ser Thr Leu Ile Gln Asp Gln Pro Asp Gln Pro Val		415
	420	425
Glu Asp Pro Asp Pro Glu Asp Phe Ala Asp Glu Gln Ser Leu Val Gly		430
	435	440
Arg Phe Ile His Leu Leu Arg Ser Glu Asp Pro Asp Gln Gln Tyr Leu		445
	450	455
Ile Leu Asn Thr Ala Arg Lys His Phe Gly Ala Gly Gly Asn Gln Arg		460
465	470	475
Ile Arg Phe Thr Leu Pro Pro Leu Val Phe Ala Ala Tyr Gln Leu Ala		480
	485	490
Phe Arg Tyr Lys Glu Asn Ser Lys Trp Met Thr Asn Gly Lys Arg Asn		495
	500	505
Ala Arg Arg Phe Phe His Leu Pro Xaa Gln Thr Ile Ser Ala Leu Ile		510
	515	520
Lys Ala Glu Leu Ala Glu Leu Pro Leu Arg Leu Phe Leu Gln Gly Ala		525
	530	535
Leu Ala Ala Gly Glu Ile Gly Phe Glu Asn His Glu Thr Val Ala Tyr		540
545	550	555
Glu Phe Met Ser Gln Ala Phe Ser Leu Tyr Glu Asp Glu Ile Ser Asp		560
	565	570
Ser Lys Ala Gln Leu Ala Ala Ile Thr Leu Ile Ile Gly Thr Phe Glu		575
	580	585
Arg Met Lys Cys Phe Ser Glu Glu Asn His Glu Pro Leu Arg Thr Gln		590
	595	600
Cys Ala Leu Ala Ala Ser Lys Leu Leu Lys Lys Pro Asp Gln Gly Arg		605
	610	615
Ala Glu His Leu Cys Thr Ser Leu Trp Ser Gly Arg Asn Thr Asp Lys		620

625		630		635		640
Asn Gly Glu Glu	Leu His Gly Gly Lys Arg Val Met Glu Cys Leu Lys					
	645		650		655	
Lys Ala Leu Lys	Ile Ala Asn Gln Cys Met Asp Pro Ser Leu Gln Val					
	660		665		670	
Gln Leu Phe Ile	Glu Ile Leu Asn Arg Tyr Ile Tyr Phe Tyr Glu Lys					
	675		680		685	
Glu Asn Asp Ala Val Thr	Ile Gln Val Leu Asn Gln Leu Ile Gln Lys					
	690		695		700	
Ile Arg Glu Asp Leu Pro Asn Leu Glu Ser Ser Glu Glu Thr Glu Gln						
705		710		715		720
Ile Asn Lys His Phe His Asn Thr Leu Glu His Leu Arg Leu Arg Arg						
	725		730		735	
Glu Ser Pro Glu Ser Glu Gly Pro Ile Tyr Glu Gly Leu Ile Leu						
	740		745		750	

<210> 6181

<211> 1135

<212> DNA

<213> Homo sapiens

<400> 6181

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 120
 cccaccacgc cctatttctc ccgggacgca cagaaacatg atgtggaagt gctggaacgg
 180
 aacttccaga ccacctctgt tgagtttgag accctctaca aagctttctc aaactgcagc
 240
 ctccccgaag gatggaaaat gaacagcacc cccagcgggg agtggttcac cttttacttg
 300
 gtcaatcagg gggtttgtgt tcccaggaac ttagtagaagt gcccacggac gtaccgcttg
 360
 ctcggaagcc ttcggacctg tattgggaac aatgtttttg ggaacgcgtg catctctgtg
 420
 ctgagccctg ggactgtgat aacggagcac tatggaccca ccaacatccg catccgatgc
 480
 catttaggtc tgaaaactcc aaatggctgt gagctggtgg tggggggaga gcccagtg
 540
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 600
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 660
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 720
 ccacgtgga gtcggcgaga agggccgagg cggggcctgg gcagactgtg gtccgggtcca
 780
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 840
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 900
 ttgtatttcc ttagattttt ttttttctt tccaatcatt tgcttcagag actcctttct
 960

ggcctaacag cgcattccctt tgattgggtcc ttgagtgacc agagacttag tgcccttgta
 1020
 agtctgtctt ctgttgctac ttgttttttt cagtgtctctg aaatagagta actaaatggt
 1080
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 1135

<210> 6182

<211> 236

<212> PRT

<213> Homo sapiens

<400> 6182

Ala	Lys	Arg	Tyr	Ser	Trp	Ser	Gly	Met	Gly	Arg	Ile	His	Lys	Gly	Ile
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Arg	Glu	Gln	Gly	Arg	Tyr	Leu	Asn	Ser	Arg	Pro	Ser	Ile	Gln	Lys	Pro
			20					25					30		
Glu	Val	Phe	Phe	Leu	Pro	Asp	Leu	Pro	Thr	Thr	Pro	Tyr	Phe	Ser	Arg
		35					40					45			
Asp	Ala	Gln	Lys	His	Asp	Val	Glu	Val	Leu	Glu	Arg	Asn	Phe	Gln	Thr
	50					55					60				
Ile	Leu	Cys	Glu	Phe	Glu	Thr	Leu	Tyr	Lys	Ala	Phe	Ser	Asn	Cys	Ser
65					70					75				80	
Leu	Pro	Gln	Gly	Trp	Lys	Met	Asn	Ser	Thr	Pro	Ser	Gly	Glu	Trp	Phe
				85					90					95	
Thr	Phe	Tyr	Leu	Val	Asn	Gln	Gly	Val	Cys	Val	Pro	Arg	Asn	Cys	Arg
			100					105					110		
Lys	Cys	Pro	Arg	Thr	Tyr	Arg	Leu	Leu	Gly	Ser	Leu	Arg	Thr	Cys	Ile
			115				120					125			
Gly	Asn	Asn	Val	Phe	Gly	Asn	Ala	Cys	Ile	Ser	Val	Leu	Ser	Pro	Gly
	130					135					140				
Thr	Val	Ile	Thr	Glu	His	Tyr	Gly	Pro	Thr	Asn	Ile	Arg	Ile	Arg	Cys
145					150					155				160	
His	Leu	Gly	Leu	Lys	Thr	Pro	Asn	Gly	Cys	Glu	Leu	Val	Val	Gly	Gly
				165					170					175	
Glu	Pro	Gln	Cys	Trp	Ala	Glu	Gly	Arg	Cys	Leu	Leu	Phe	Asp	Asp	Ser
			180					185					190		
Phe	Leu	His	Ala	Ala	Phe	His	Glu	Gly	Ser	Ala	Glu	Asp	Gly	Pro	Arg
		195					200					205			
Val	Val	Phe	Met	Val	Asp	Leu	Trp	His	Pro	Asn	Val	Ala	Ala	Ala	Glu
	210					215					220				
Arg	Gln	Ala	Leu	Asp	Phe	Ile	Phe	Ala	Pro	Gly	Arg				
225					230					235					

<210> 6183

<211> 2530

<212> DNA

<213> Homo sapiens

<400> 6183

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 120

aggttgtgtt gcgggggtcg ggtagctgta ggtcttagaa atggcatcaa aggtggcctt
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240
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300
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660
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720
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1740

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 1920
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 2040
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 2100
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 2160
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 2520
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 2530

<210> 6184

<211> 308

<212> PRT

<213> Homo sapiens

<400> 6184

Arg	Ala	Ser	Thr	Pro	Tyr	Leu	Arg	Pro	Cys	Leu	Arg	Glu	Leu	Arg	Gly
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Leu	Gly	Pro	Gly	Pro	Val	His	Gly	Arg	Asp	Pro	Gly	Pro	Gly	Gly	Pro
		20					25				30				
Gly	Met	Gly	Asn	Arg	Gly	Gly	Phe	Arg	Gly	Gly	Phe	Gly	Ser	Gly	Ile
	35					40					45				
Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly
	50				55					60					
Ala	Arg	Gly	Gly	Lys	Ala	Glu	Asp	Lys	Glu	Trp	Met	Pro	Val	Thr	Lys
65				70				75							80
Leu	Gly	Arg	Leu	Val	Lys	Asp	Met	Lys	Ile	Lys	Ser	Leu	Glu	Glu	Ile
			85					90						95	
Tyr	Leu	Phe	Ser	Leu	Pro	Ile	Lys	Glu	Ser	Glu	Ile	Ile	Asp	Phe	Phe
			100					105					110		
Leu	Gly	Ala	Ser	Leu	Lys	Asp	Glu	Val	Leu	Lys	Ile	Met	Pro	Val	Gln
		115					120					125			
Lys	Gln	Thr	Arg	Ala	Gly	Gln	Arg	Thr	Arg	Phe	Lys	Ala	Phe	Val	Ala
	130					135					140				
Ile	Gly	Asp	Tyr	Asn	Gly	His	Val	Gly	Leu	Gly	Val	Lys	Cys	Ser	Lys

145 150 155 160
 Glu Val Ala Thr Ala Ile Arg Gly Ala Ile Ile Leu Ala Lys Leu Ser
 165 170 175
 Ile Val Pro Val Arg Arg Gly Tyr Trp Gly Asn Lys Ile Gly Lys Pro
 180 185 190
 His Thr Val Pro Cys Lys Val Thr Gly Arg Cys Gly Ser Val Leu Val
 195 200 205
 Arg Leu Ile Pro Ala Pro Arg Gly Thr Gly Ile Val Ser Ala Pro Val
 210 215 220
 Pro Lys Lys Leu Leu Met Met Ala Gly Ile Asp Asp Cys Tyr Thr Ser
 225 230 235 240
 Ala Arg Gly Cys Thr Ala Thr Leu Gly Asn Phe Ala Lys Ala Thr Phe
 245 250 255
 Asp Ala Ile Ser Lys Thr Tyr Ser Tyr Leu Thr Pro Asp Leu Trp Lys
 260 265 270
 Glu Thr Val Phe Thr Lys Ser Pro Tyr Gln Glu Phe Thr Asp His Leu
 275 280 285
 Val Lys Thr His Thr Arg Val Ser Val Gln Arg Thr Gln Ala Pro Ala
 290 295 300
 Val Ala Thr Thr
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<210> 6185

<211> 1231

<212> DNA

<213> Homo sapiens

<400> 6185

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 120
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 180
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 300
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 660
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 720
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 780

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 900
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 960
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 1020
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 1080
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 1140
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 1200
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 1231

<210> 6186
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 6186
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 20 25 30
 Gly Tyr Ile Cys Arg Ile Cys His Lys Phe Tyr His Ser Asn Ser Gly
 35 40 45
 Ala Gln Leu Ser His Cys Lys Ser Leu Gly His Phe Glu Asn Leu Gln
 50 55 60
 Lys Tyr Lys Ala Ala Lys Asn Pro Ser Pro Thr Thr Arg Pro Val Ser
 65 70 75 80
 Arg Arg Cys Ala Ile Asn Ala Arg Asn Ala Leu Thr Ala Leu Phe Thr
 85 90 95
 Ser Ser Gly Arg Pro Pro Ser Gln Pro Asn Thr Gln Asp Lys Thr Pro
 100 105 110
 Ser Lys Val Thr Ala Arg Pro Ser Gln Pro Pro Leu Pro Arg Arg Ser
 115 120 125
 Thr Arg Leu Lys Thr
 130

<210> 6187
 <211> 909
 <212> DNA
 <213> Homo sapiens

<400> 6187
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 180

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 300
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 360
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 660
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 780
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 909

<210> 6188

<211> 227

<212> PRT

<213> Homo sapiens

<400> 6188

Met Gly Trp Thr Met Arg Leu Val Thr Ala Ala Leu Leu Leu Gly Leu
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 Met Met Val Val Thr Gly Asp Glu Asp Glu Asn Ser Pro Cys Ala His
 20 25 30
 Glu Ala Leu Leu Asp Glu Asp Thr Leu Phe Cys Gln Gly Leu Glu Val
 35 40 45
 Phe Tyr Pro Glu Leu Gly Asn Ile Gly Cys Lys Val Val Pro Asp Cys
 50 55 60
 Asn Asn Tyr Arg Gln Lys Ile Thr Ser Trp Met Glu Pro Ile Val Lys
 65 70 75 80
 Phe Pro Gly Ala Val Tyr Gly Ala Thr Tyr Ile Leu Val Met Val Asp
 85 90 95
 Pro Asp Ala Pro Ser Arg Ala Glu Pro Arg Gln Arg Phe Trp Arg His
 100 105 110
 Trp Leu Val Thr Asp Ile Lys Gly Ala Asp Leu Lys Lys Gly Lys Ile
 115 120 125
 Gln Gly Gln Glu Leu Ser Ala Tyr Gln Ala Pro Ser Pro Pro Ala His
 130 135 140
 Ser Gly Phe His Arg Tyr Gln Phe Phe Val Tyr Leu Gln Glu Gly Lys
 145 150 155 160
 Val Ile Ser Leu Leu Pro Lys Glu Asn Lys Thr Arg Gly Ser Trp Lys

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 1200
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Ala	Ala	Asp	Phe	Ala	Thr	His	Gly	Lys	Leu	Gly	Lys	Leu	Glu	Phe	Ala
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Ile	Asp	Met	Asn	Asp	Ile	Glu	Asp	Asp	Ala	Tyr	Ala	Glu	Lys	Asp	Gly
				245					250					255	
Cys	Gly	Met	Asp	Ser	Leu	Asn	Lys	Lys	Phe	Ser	Ser	Ala	Val	Leu	Gly
			260					265					270		
Glu	Gly	Pro	Asn	Asn	Gly	Tyr	Phe	Asp	Lys	Leu	Pro	Tyr	Glu	Leu	Ile
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Gln	Thr	Cys	Lys	Leu	Leu	Ser	Gln	His	Cys	Cys	Asp	Pro	Leu	Gln	Tyr
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Ile	His	Leu	Asn	Leu	Gln	Pro	Tyr	Trp	Ala	Lys	Leu	Asp	Asp	Thr	Ser
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			340					345					350		
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Pro	Asn	Leu	Gln	Ala	Leu	Asn	Leu	Ser	Ser	Cys	Asp	Lys	Leu	Pro	Pro
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Gln	Ala	Phe	Asn	His	Ile	Ala	Lys	Leu	Cys	Ser	Leu	Lys	Arg	Leu	Val
			420					425					430		
Leu	Tyr	Arg	Thr	Lys	Val	Glu	Gln	Thr	Ala	Leu	Leu	Ser	Ile	Leu	Asn
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			500					505					510		
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	595		600		605
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<210> 6195

<211> 518

<212> DNA

<213> Homo sapiens

<400> 6195

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<210> 6196

<211> 117

<212> PRT

<213> Homo sapiens

<400> 6196

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			20					25					30		
Leu	Leu	Leu	Ser	Arg	Thr	Thr	Arg	Val	Lys	Pro	His	Pro	Tyr	Lys	Tyr
			35				40					45			
Gln	Val	His	Pro	Asn	Ser	Ser	Leu	Ala	Gln	Lys	Trp	Cys	Tyr	Ile	His
			50			55					60				
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65					70				75					80	
Ala	Asn	Glu	Leu	Cys	Pro	Gly	Asn	Ser	Phe	Thr	Pro	Ser	Ser	Cys	Ser
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Phe	His	Ser	His	Leu	Leu	Ser	Thr	Asn	Tyr	Ala	Lys	Asn	Tyr	Val	Gln
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<210> 6197

<211> 2841

<212> DNA

<213> Homo sapiens

<400> 6197

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<210> 6198

<211> 124

<212> PRT

<213> Homo sapiens

<400> 6198

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Ser	Ser	Gln	His	His	Gly	Leu	Asn	Thr	His	Trp	Ala	Pro	Thr	Leu	Gly
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Pro	Gly	Trp	Gly	Met	Trp	Gly	Gln	Glu	Ala	Ala	Gln	Ser	Gly	Arg	Gln
	50					55					60				
Arg	Glu	Lys	Cys	Val	Gln	Arg	Ala	Pro	Ile	Ser	Gly	Cys	Asn	Val	Val
65					70					75				80	
Leu	Arg	Leu	Trp	Leu	Gly	Ser	Ala	Ser	Arg	Val	Ser	Tyr	Val	Leu	Cys
			85					90					95		
Ser	Tyr	Phe	Leu	Ser	Pro	Thr	Leu	Pro	Cys	Arg	Asn	Pro	Ser	Glu	Tyr
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<210> 6199
 <211> 1777
 <212> DNA
 <213> Homo sapiens

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<210> 6200

<211> 164

<212> PRT

<213> Homo sapiens

<400> 6200

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		20						25					30		
Pro	Pro	Lys	Pro	Asp	Cys	Gln	Gln	Lys	Pro	Ser	Pro	Ser	Glu	Gly	Gln
		35				40						45			
Val	Gly	Val	Pro	Xaa	Arg	Ser	Pro	His	Pro	Gln	Gly	Gly	Phe	Thr	His
		50				55					60				
Cys	Pro	Val	Pro	Gly	Met	Pro	Gly	Gly	Arg	Pro	Leu	Cys	Cys	Cys	His
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Cys	Cys	Gln	His	Cys	Pro	Ala	Cys	Glu	Ala	Arg	Arg	Ser	Pro	Cys	Pro
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Thr	Arg	Cys	Cys	Cys	Ser	Ser	Asp	Pro	Cys	Cys	Glu	Glu	Trp	Asp	Ser
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Trp	Ser	Lys	Lys	Leu	Val	Phe	Leu	Phe	Cys	Ile	Asn	Glu	Lys	Asn	Pro
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Gly	Glu	Ala	Ala	Thr	Leu	Pro	Ser	Gln	Arg	Asp	Ala	Leu	Pro	Cys	Phe
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Ser Ser Trp Phe

150

155

160

<210> 6201
<211> 604
<212> DNA
<213> Homo sapiens

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<210> 6202
<211> 124
<212> PRT
<213> Homo sapiens

<400> 6202
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35 40 45
Ala Gly Leu Arg Gly Cys Arg Glu Glu Phe Gly Gly Lys Gly Gln Pro
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Gln Ser Leu Ser Cys Ala Ser Trp Glu Arg Gly Met Thr Gly Arg His
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Thr Asn Val Ser Gln Gly Arg Trp Ala Trp Gly His Arg Ala Pro Arg
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<210> 6203

<211> 3462

<212> DNA

<213> Homo sapiens

<400> 6203

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<212> PRT

<213> Homo sapiens

<400> 6204

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<211> 926

<212> DNA

<213> Homo sapiens

<400> 6205

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<212> PRT

<213> Homo sapiens

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			20					25					30		
Arg	Glu	Gly	Lys	Glu	Phe	Ala	Asp	Ser	Gln	Lys	Leu	Leu	Phe	Met	Glu
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Thr	Ser	Ala	Lys	Leu	Asn	His	Gln	Val	Ser	Glu	Val	Phe	Asn	Thr	Val
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Ala	Gln	Glu	Leu	Leu	Gln	Arg	Ser	Asp	Glu	Glu	Gly	Gln	Ala	Leu	Xaa
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<211> 1384

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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		35					40					45			
Ser	Ala	Ala	Ala	Thr	Val	Arg	Glu	Ala	Gln	Gly	Leu	Met	Ala	Gly	Gly
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Phe	Leu	Cys	Phe	Ser	Leu	Ala	Phe	Xaa	Ala	Gln	Val	Gln	Val	Val	Phe
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Trp	Arg	Leu	His	Ser	Pro	Thr	Gln	Val	Glu	Asp	Ala	Met	Leu	Asp	Thr

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Lys	Ser	Pro	Phe	Ser	Arg	Leu	Gly	Ser	Thr	Glu	Ala	Asp	Leu	Cys	Gln
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600
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Ser Pro Ser Leu Arg Gly Thr His Leu Leu Phe Leu Pro Gln Ala Asp
35 40 45
Val Val Asp Glu Ala Ile Asp Ser Leu Ala Arg Thr Lys Gly Val Met
50 55 60
Lys Pro Pro Cys Ser Glu Gly Ser Pro Trp Arg Cys Pro His Phe Thr
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Cys Trp Val Leu Gln Ala Arg Lys Pro Gly Ser Gly Gly Thr Arg Glu
85 90 95
Arg Gln Ala Cys Val Trp Thr Ser Ala Gly Ala Ala Ala Leu Arg Leu
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Ala Arg Glu Arg Gln Arg Trp Val Phe Arg Phe His Ala Tyr Val Trp
115 120 125
Ala His Ser Gln His Gly Arg Val Ser Ala Val Leu Val Leu Thr Leu
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 35 40 45
 Ala Phe Glu Gly Ser Tyr Leu Glu Asp Thr Gln Met Tyr Gly Asn Ile
 50 55 60
 Ile Arg Gly Trp Xaa Ser Val Ser Asp Gln Pro Xaa Lys Asn Ser Asn
 65 70 75 80
 Ser Lys Asn Asp Arg Arg Asn Arg Lys Phe Lys Glu Ala Glu Arg Leu
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 Glu Ser Asp Thr Ser Pro Asp Phe His Asn Gln Glu Asn Glu Pro Ser
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 Gln Glu Asp Pro Glu Asp Leu Asp Gly Ser Val Gln Gly Val Lys Pro
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 Gln Lys Ala Ala Ser Ser Thr Ser Ser Gly Ser His His Ser Ser His
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 Lys Lys Arg Lys Asn Lys Asn Arg His Ser Pro Ser Gly Met Phe Asp
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<210> 6213
 <211> 1160
 <212> DNA
 <213> Homo sapiens

<400> 6213
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<210> 6214

<211> 101

<212> PRT

<213> Homo sapiens

<400> 6214

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		20						25					30		
Glu	Pro	Ala	Xaa	Cys	Leu	His	Gln	Thr	Gly	Pro	His	Leu	Gly	Pro	Pro
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Pro	Pro	Pro	Pro	Pro	Thr	Pro	Pro	Pro	Thr	Cys	Ile	Ala	Gln	Ile	Gln
	50					55					60				
Val	Met	Met	Glu	Gln	Ile	Arg	Pro	Trp	His	Ser	Arg	Met	Lys	Arg	Arg
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Lys	Gly	Val	Met	Glu	Gly	Gln	Ser	Leu	Glu	Pro	Ala	Ala	Ser	Ser	Gly
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 <213> Homo sapiens

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<210> 6216
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 6216
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 35 40 45
 Leu Gln Glu Ser Asp Ala Ala Pro Leu Pro Leu Ser Cys His Leu Ala
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<210> 6217
 <211> 2955
 <212> DNA
 <213> Homo sapiens

<400> 6217

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<210> 6218

<211> 133

<212> PRT

<213> Homo sapiens

<400> 6218

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Gly Tyr Ile Cys Arg Ile Cys His Lys Phe Tyr His Ser Asn Ser Gly			
	35	40	45
Ala Gln Leu Ser His Cys Lys Ser Leu Gly His Phe Glu Asn Leu Gln			
	50	55	60
Lys Tyr Lys Ala Ala Lys Asn Pro Ser Pro Thr Thr Arg Pro Val Ser			
65	70	75	80
Arg Arg Cys Ala Ile Asn Ala Arg Asn Ala Leu Thr Ala Leu Phe Thr			
	85	90	95
Ser Ser Gly Arg Pro Pro Ser Gln Pro Asn Thr Gln Asp Lys Thr Pro			
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<210> 6219

<211> 2495

<212> DNA

<213> Homo sapiens

<400> 6219

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<210> 6220

<211> 179

<212> PRT

<213> Homo sapiens

<400> 6220

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Ser Ala Gly Asn Thr Ala Arg Cys Pro Gln Thr Pro Gly Ser Ala Gln
          35           40           45
Gly Gly Pro Ala Pro Ser Pro Gln Xaa Tyr Ile His Asp Ser Pro Ser
          50           55           60
Cys Trp Pro Trp Thr Lys Ala Gly Ser Ser Xaa Cys Pro Val Arg Ser
65           70           75           80
Pro Tyr Ser Pro Pro Ala Ala Arg Pro Gly Pro Gly Xaa Pro Leu Trp
          85           90           95
Cys Gln Arg Val Ser Gln Asn Pro Gly Pro Ser Pro Ser Xaa Gly Pro
          100          105          110
Leu Pro Ser Pro Arg Pro Val Cys Trp Asp Gly Ala Ser Thr Leu Arg
          115          120          125
Leu Val Lys Ala Glu Leu Asn Ser Ser Asn Glu Ser Ala Gly Trp Ala
          130          135          140
Trp Gly Asp Gly Glu Gln Ala Pro Pro Arg Ala Ser Ser Glu Gly Gly
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<210> 6221

<211> 1487

<212> DNA

<213> Homo sapiens

<400> 6221

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<210> 6222

<211> 330

<212> PRT

<213> Homo sapiens

<400> 6222

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			20					25					30		
Lys	Leu	His	Lys	Cys	Lys	Glu	Phe	Val	Asp	Ser	Cys	Arg	Leu	Thr	Phe
		35					40				45				
Pro	Thr	Ser	Gly	Asp	Glu	Tyr	Ser	Arg	Gly	Phe	Leu	Gln	Asn	Leu	Asn
		50				55				60					
Leu	Ile	Gln	Asp	Gln	Asn	Ala	Gln	Thr	Arg	Trp	Lys	Gln	Gly	Arg	Tyr
65				70					75					80	
Asp	Glu	Asp	Gly	Lys	Pro	Phe	Asn	Gln	Arg	Ser	Leu	Leu	Leu	Gly	His
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<210> 6224

<211> 156

<212> PRT

<213> Homo sapiens

<400> 6224

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			20					25					30		
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<211> 3851

<212> DNA

<213> Homo sapiens

<400> 6225

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<212> PRT

<213> Homo sapiens

<400> 6226

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Gln	Gly	Asp	Phe	Ile	Lys	Cys	Val	Glu	Gln	Lys	Thr	Asp	Ala	Leu	Gly
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		50				55					60				
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Gln	Ile	Trp	Gln	Gln	Tyr	Phe	Ala	Ala	Lys	Asp	Thr	Val	Tyr	Ala	Val
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			100					105					110		
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<212> DNA

<213> Homo sapiens

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<211> 271

<212> PRT

<213> Homo sapiens

<400> 6228

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Ile Pro Ser Pro Gly Arg Val Ala Glu Trp Glu Val Gln Asn Arg
35           40           45
Ile Pro Ser Gly Thr Ile Leu Lys Ala Leu Met Glu Gly Gly Glu Asn
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Gly Pro Trp Met Arg Phe Met Arg Ala Glu Ile Thr Ala Glu Gly Phe
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Leu Arg Glu Phe Gly Arg Leu Cys Ser Glu Met Leu Lys Thr Ser Val

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Gln	Phe	Pro	Val	Met	Thr	Glu	Ala	Ile	Thr	Gln	Ile	Arg	Ala	Lys	Gly			
				115			120			125								
Leu	Gln	Thr	Ala	Val	Leu	Ser	Asn	Asn	Phe	Tyr	Leu	Pro	Asn	Gln	Lys			
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<213> Homo sapiens

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<211> 944

<212> PRT

<213> Homo sapiens

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His	Ala	Ser	Lys	Arg	Ile	Leu	Phe	Ser	Ile	Val	His	Asp	Lys	Ser	Glu																								
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Glu	Cys	Val	Gln	Ile	Leu	Phe	Asn	Ser	Arg	Tyr	Ala	Glu	Ala	Leu	Gly																								
															355					360					365														
Leu	Gly	Asn	Met	Val	Pro	Val	Pro	Tyr	Arg	Lys	Ile	Ala	Cys	Asp	Pro																								
															370					375					380														
Glu	Ala	Val	Glu	Ile	Val	Gly	Ile	Pro	Asp	Lys	Ile	Pro	Phe	Lys	Arg																								
385																390					395					400													
Pro	Cys	Thr	Tyr	Gly	Val	Pro	Lys	Leu	Lys	Arg	Ile	Leu	Glu	Glu	Arg																								
															405					410					415														
His	Ser	Ile	His	Phe	Ile	Ile	Lys	Arg	Met	Phe	Asp	Glu	Arg	Ile	Phe																								
															420					425					430														
Thr	Gly	Asn	Lys	Phe	Thr	Lys	Asp	Thr	Thr	Lys	Leu	Glu	Pro	Ala	Ser																								
															435					440					445														
Pro	Pro	Glu	Asp	Thr	Ser	Ala	Glu	Val	Ser	Arg	Ala	Thr	Val	Leu	Asp																								
															450					455					460														
Leu	Ala	Gly	Asn	Ala	Arg	Ser	Asp	Lys	Gly	Ser	Met	Ser	Glu	Asp	Cys																								
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Gly	Pro	Gly	Thr	Ser	Gly	Glu	Leu	Gly	Gly	Leu	Arg	Pro	Ile	Lys	Ile																								
															485					490					495														
Glu	Pro	Glu	Asp	Leu	Asp	Ile	Ile	Gln	Val	Thr	Val	Pro	Asp	Pro	Ser																								
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Val	Ile	Arg	Pro	Leu	Arg	Lys	Gln	Val	Glu</																														

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Lys	Ile	Leu	Glu	Ala	Ser	Asn	Ser	Ile	Gln	Phe	Val	Ile	Lys	Arg	Pro
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Glu	Leu	Leu	Thr	Glu	Gly	Val	Lys	Glu	Pro	Ile	Val	Asp	Ser	Gln	Glu
			645					650					655		
Arg	Asp	Ser	Gly	Asp	Pro	Leu	Val	Asp	Glu	Ser	Leu	Lys	Arg	Gln	Gly
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Phe	Gln	Glu	Asn	Tyr	Asp	Ala	Arg	Leu	Ser	Arg	Ile	Asp	Ile	Ala	Asn
	675						680					685			
Thr	Leu	Arg	Glu	Gln	Val	Gln	Asp	Leu	Phe	Asn	Lys	Lys	Tyr	Gly	Glu
690						695				700					
Ala	Leu	Gly	Ile	Lys	Tyr	Pro	Val	Gln	Val	Pro	Tyr	Lys	Arg	Ile	Lys
705					710					715				720	
Ser	Asn	Pro	Gly	Ser	Val	Ile	Ile	Glu	Gly	Leu	Pro	Pro	Gly	Ile	Pro
			725					730					735		
Phe	Arg	Lys	Pro	Cys	Thr	Phe	Gly	Ser	Gln	Asn	Leu	Glu	Arg	Ile	Leu
		740					745						750		
Ala	Val	Ala	Asp	Lys	Ile	Lys	Phe	Thr	Val	Thr	Arg	Pro	Phe	Gln	Gly
		755					760					765			
Leu	Ile	Pro	Lys	Pro	Asp	Glu	Asp	Asp	Ala	Asn	Arg	Leu	Gly	Glu	Lys
770						775					780				
Val	Ile	Leu	Arg	Glu	Gln	Val	Lys	Glu	Leu	Phe	Asn	Glu	Lys	Tyr	Gly
785					790					795					800
Glu	Ala	Leu	Gly	Leu	Asn	Arg	Pro	Val	Leu	Val	Pro	Tyr	Lys	Leu	Ile
			805					810					815		
Arg	Asp	Ser	Pro	Asp	Ala	Val	Glu	Val	Thr	Gly	Leu	Pro	Asp	Asp	Ile
		820						825					830		
Pro	Phe	Arg	Asn	Pro	Asn	Thr	Tyr	Asp	Ile	His	Arg	Leu	Glu	Lys	Ile
	835					840						845			
Leu	Lys	Ala	Arg	Glu	His	Val	Arg	Met	Val	Ile	Ile	Asn	Gln	Leu	Gln
850						855					860				
Pro	Phe	Ala	Glu	Ile	Cys	Asn	Asp	Ala	Lys	Val	Pro	Ala	Lys	Asp	Ser
865					870					875					880
Ser	Ile	Pro	Lys	Arg	Lys	Arg	Lys	Arg	Val	Ser	Glu	Gly	Asn	Ser	Val
			885					890					895		
Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Asn	Pro	Asp	Ser
		900						905					910		
Val	Ala	Ser	Ala	Asn	Gln	Ile	Ser	Leu	Val	Gln	Trp	Pro	Met	Tyr	Met
	915						920					925			
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<210> 6231

<211> 471

<212> DNA

<213> Homo sapiens

<400> 6231

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120

ttgccttttt aaaaaaaaaa aaaaggctca aaaaaagagt atgctgggcc aaaaatctgg
 180
 cccctcaggc ctctgacct ggaggagaaa aaggggcccg aagccccccg ttgcccccat
 240
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 300
 ggggacaaaa aaatgggagc tggatttttc aacgccggaa acccaattcc caccctctgg
 360
 ccggccgttc ttagggattc caacttggga cccaacctgg gcgtattctg ggccttactt
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<210> 6232
 <211> 138
 <212> PRT
 <213> Homo sapiens

<400> 6232
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 20 25 30
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 35 40 45
 Trp Arg Arg Lys Arg Gly Pro Lys Pro Pro Val Ala Pro Ile Ser Ile
 50 55 60
 Trp Asn Gly Thr Thr Pro Arg Gly Glu Pro Pro Pro Asn His Ser Ser
 65 70 75 80
 Lys Lys Gly Thr Lys Lys Trp Ala Leu Asp Phe Ser Thr Pro Glu Thr
 85 90 95
 Gln Phe Pro Pro Pro Gly Arg Pro Phe Leu Gly Ile Pro Thr Trp Asp
 100 105 110
 Pro Thr Trp Ala Tyr Ser Gly Pro Tyr Leu Phe Leu Val Gly Ile Gly
 115 120 125
 Ile Pro Phe Pro Phe Pro Pro Pro Ser Asn
 130 135

<210> 6233
 <211> 894
 <212> DNA
 <213> Homo sapiens

<400> 6233
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 120
 agggaaggag acgattggag tcaactcaat gtgctcaaaa aaagaagagt cggggacctc
 180
 ctaccagtt acattccaga ggatgaggcg ctgatgcttc gggatggacg ctttgcttgt
 240
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 300

ggcaagaaac atctgtccag cttgcagctt ttctatggca agaagcagcc gggaaaggaa
 360
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 420
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 480
 aacagttgct gccgccggaa gtacagacca gaagcccctg gtccctctgt ctccctttcc
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 780
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<210> 6234

<211> 230

<212> PRT

<213> Homo sapiens

<400> 6234

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Lys	Lys	Arg	Arg	Val	Gly	Asp	Leu	Leu	Ala	Ser	Tyr	Ile	Pro	Glu	Asp
			20					25					30		
Glu	Ala	Leu	Met	Leu	Arg	Asp	Gly	Arg	Phe	Ala	Cys	Ala	Ile	Cys	Pro
			35				40					45			
His	Arg	Pro	Val	Leu	Asp	Thr	Leu	Ala	Met	Leu	Thr	Ala	His	Arg	Ala
			50				55				60				
Gly	Lys	Lys	His	Leu	Ser	Ser	Leu	Gln	Leu	Phe	Tyr	Gly	Lys	Lys	Gln
65				70					75					80	
Pro	Gly	Lys	Glu	Arg	Lys	Gln	Asn	Pro	Lys	His	Gln	Asn	Glu	Leu	Arg
			85					90					95		
Arg	Glu	Glu	Thr	Lys	Ala	Glu	Ala	Pro	Leu	Leu	Thr	Gln	Thr	Arg	Leu
			100					105					110		
Ile	Thr	Gln	Ser	Ala	Leu	His	Arg	Ala	Pro	His	Tyr	Asn	Ser	Cys	Cys
			115				120					125			
Arg	Arg	Lys	Tyr	Arg	Pro	Glu	Ala	Pro	Gly	Pro	Ser	Val	Ser	Leu	Ser
			130			135					140				
Pro	Met	Pro	Pro	Ser	Glu	Val	Lys	Leu	Gln	Ser	Gly	Lys	Ile	Ser	Arg
145				150					155					160	
Glu	Pro	Glu	Pro	Ala	Ala	Gly	Pro	Gln	Ala	Glu	Glu	Ser	Ala	Thr	Val
			165					170					175		
Ser	Ala	Pro	Ala	Pro	Met	Ser	Pro	Thr	Arg	Arg	Arg	Ala	Leu	Asp	His
			180					185					190		
Tyr	Leu	Thr	Leu	Arg	Ser	Ser	Gly	Trp	Ile	Pro	Asp	Gly	Arg	Gly	Arg
			195				200					205			
Trp	Val	Lys	Asp	Glu	Asn	Val	Glu	Phe	Asp	Ser	Asp	Glu	Glu	Glu	Pro

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Pro Asp Leu Pro Leu Asp
225 230

215

220

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<210> 6235
<211> 3427
<212> DNA
<213> Homo sapiens
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<400> 6235
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120
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180
gatgtgaagc ctggcgcgga agagcagacc caggtggcca aagctgcctt caagcgcttc
240
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300
ctccacgtcg tgacagaggc tgtgaccccg ttgggaatat acctcaaggc gagagtggag
360
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420
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480
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540
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600
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660
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720
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900
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1140
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 1740
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 2160
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caccgaggtc tgggccgagg gcggcgctcgg cggcgctcagc ggccggcgctg gggaacgcag
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 3240
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<210> 6236

<211> 820

<212> PRT

<213> Homo sapiens

<400> 6236

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Ala	Arg	Asp	Pro	Val	Arg	Asp	Phe	Pro	Phe	Glu	Leu	Ile	Pro	Glu	Pro
			20					25					30		
Pro	Glu	Gly	Gly	Leu	Pro	Gly	Pro	Trp	Ala	Leu	His	Arg	Gly	Arg	Lys
			35				40					45			
Lys	Ala	Thr	Gly	Ser	Pro	Val	Ser	Ile	Phe	Val	Tyr	Asp	Val	Lys	Pro
			50				55				60				
Gly	Ala	Glu	Glu	Gln	Thr	Gln	Val	Ala	Lys	Ala	Ala	Phe	Lys	Arg	Phe
65					70					75				80	
Lys	Thr	Leu	Arg	His	Pro	Asn	Ile	Leu	Ala	Tyr	Ile	Asp	Gly	Leu	Glu
				85					90					95	
Thr	Glu	Lys	Cys	Leu	His	Val	Val	Thr	Glu	Ala	Val	Thr	Pro	Leu	Gly
			100					105					110		
Ile	Tyr	Leu	Lys	Ala	Arg	Val	Glu	Ala	Gly	Gly	Leu	Lys	Glu	Leu	Glu
			115				120					125			
Ile	Ser	Trp	Gly	Leu	His	Gln	Ile	Val	Lys	Ala	Leu	Ser	Phe	Leu	Val
			130			135					140				
Asn	Asp	Cys	Ser	Leu	Ile	His	Asn	Asn	Val	Cys	Met	Ala	Ala	Val	Phe
145					150					155				160	
Val	Asp	Arg	Ala	Gly	Trp	Lys	Leu	Gly	Gly	Leu	Asp	Tyr	Met	Tyr	
				165				170					175		
Ser	Ala	Gln	Gly	Asn	Gly	Gly	Gly	Pro	Pro	Arg	Lys	Gly	Ile	Pro	Glu
			180				185						190		
Leu	Glu	Gln	Tyr	Asp	Pro	Pro	Glu	Leu	Ala	Asp	Ser	Ser	Gly	Arg	Val
			195				200					205			
Val	Arg	Glu	Lys	Trp	Ser	Ala	Asp	Met	Trp	Arg	Leu	Gly	Cys	Leu	Ile
			210			215					220				
Trp	Glu	Val	Phe	Asn	Gly	Pro	Leu	Pro	Arg	Ala	Ala	Ala	Leu	Arg	Asn

225 230 235 240
 Pro Gly Lys Ile Pro Lys Thr Leu Val Pro His Tyr Cys Glu Leu Val
 245 250 255
 Gly Ala Asn Pro Lys Val Arg Pro Asn Pro Ala Arg Phe Leu Gln Asn
 260 265 270
 Cys Arg Ala Pro Gly Gly Phe Met Ser Asn Arg Phe Val Glu Thr Asn
 275 280 285
 Leu Phe Leu Glu Glu Ile Gln Ile Lys Glu Pro Ala Glu Lys Gln Lys
 290 295 300
 Phe Phe Gln Glu Leu Ser Lys Ser Leu Asp Ala Phe Pro Glu Asp Phe
 305 310 315 320
 Cys Arg His Lys Val Leu Pro Gln Leu Leu Thr Ala Phe Glu Phe Gly
 325 330 335
 Asn Ala Gly Ala Val Val Leu Thr Pro Leu Phe Lys Val Gly Lys Phe
 340 345 350
 Leu Ser Ala Glu Glu Tyr Gln Gln Lys Ile Ile Pro Val Val Val Lys
 355 360 365
 Met Phe Ser Ser Thr Asp Arg Ala Met Arg Ile Arg Leu Leu Gln Gln
 370 375 380
 Met Glu Gln Phe Ile Gln Tyr Leu Asp Glu Pro Thr Val Asn Thr Gln
 385 390 395 400
 Ile Phe Pro His Val Val His Gly Phe Leu Asp Thr Asn Pro Ala Ile
 405 410 415
 Arg Glu Gln Thr Val Lys Ser Met Leu Leu Leu Ala Pro Lys Leu Asn
 420 425 430
 Glu Ala Asn Leu Asn Val Glu Leu Met Lys His Phe Ala Arg Leu Gln
 435 440 445
 Ala Lys Asp Glu Gln Gly Pro Ile Arg Cys Asn Thr Thr Val Cys Leu
 450 455 460
 Gly Lys Ile Gly Ser Tyr Leu Ser Ala Ser Thr Arg His Arg Val Leu
 465 470 475 480
 Thr Ser Ala Phe Ser Arg Ala Thr Arg Asp Pro Phe Ala Pro Ser Arg
 485 490 495
 Val Ala Gly Val Leu Gly Phe Ala Ala Thr His Asn Leu Tyr Ser Met
 500 505 510
 Asn Asp Cys Ala Gln Lys Ile Leu Pro Val Leu Cys Gly Leu Thr Val
 515 520 525
 Asp Pro Glu Lys Ser Val Arg Asp Gln Ala Phe Lys Ala Ile Arg Ser
 530 535 540
 Phe Leu Ser Lys Leu Glu Ser Val Ser Glu Asp Pro Thr Gln Leu Glu
 545 550 555 560
 Glu Val Glu Lys Asp Val His Ala Ala Ser Ser Pro Gly Met Gly Gly
 565 570 575
 Ala Ala Ala Ser Trp Ala Gly Trp Ala Val Thr Gly Val Ser Ser Leu
 580 585 590
 Thr Ser Lys Leu Ile Arg Ser His Pro Thr Thr Ala Pro Thr Glu Thr
 595 600 605
 Asn Ile Pro Gln Arg Pro Thr Pro Glu Gly Val Pro Ala Pro Ala Pro
 610 615 620
 Thr Pro Val Pro Ala Thr Pro Thr Thr Ser Gly His Trp Glu Thr Gln
 625 630 635 640
 Glu Glu Asp Lys Asp Thr Ala Glu Asp Ser Ser Thr Ala Asp Arg Trp
 645 650 655
 Asp Asp Glu Asp Trp Gly Ser Leu Glu Gln Glu Ala Glu Ser Val Leu

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<210> 6237
<211> 494
<212> DNA
<213> Homo sapiens
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360
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494

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<210> 6238
<211> 141
<212> PRT
<213> Homo sapiens
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<400> 6238
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1           5           10           15
Leu Ala Phe Val Ser Leu Ser Leu Gln Phe Phe His Leu Ile Pro Val
                20                25                30
Ser Thr Pro Lys Asn Gly Met Ser Ser Lys Ser Arg Lys Arg Ile Met
                35                40                45
Pro Asp Pro Val Thr Glu Pro Pro Val Thr Asp Pro Val Tyr Glu Ala
                50                55                60
Leu Leu Tyr Cys Asn Ile Pro Ser Val Ala Glu Arg Ser Met Glu Gly
65                70                75                80
His Ala Pro His His Phe Lys Leu Val Ser Val His Val Phe Ile Arg
                85                90                95
His Gly Asp Arg Tyr Pro Leu Tyr Val Ile Pro Lys Thr Lys Arg Pro
                100                105                110
Glu Ile Asp Cys Thr Leu Val Ala Asn Arg Lys Pro Tyr His Pro Lys
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Leu Glu Ala Phe Ile Ser His Met Leu Arg Gly Ser Gly
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<210> 6239

<211> 911

<212> DNA

<213> Homo sapiens

<400> 6239

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<210> 6240

<211> 235

<212> PRT

<213> Homo sapiens

<400> 6240

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Leu Glu Leu Leu Ser Pro Phe Gln Leu Tyr Phe Asn Pro His Leu Val
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Phe Arg Lys Phe Gln Val Trp Arg Leu Val Thr Asn Phe Leu Phe Phe
          50          55          60
Gly Pro Leu Gly Phe Ser Phe Phe Phe Asn Met Leu Phe Val Phe Arg
65          70          75          80
Tyr Cys Arg Met Leu Glu Glu Gly Ser Phe Arg Gly Arg Thr Ala Asp
          85          90          95
Phe Val Phe Met Phe Leu Phe Gly Gly Val Leu Met Thr Leu Leu Gly
          100          105          110
Leu Leu Gly Ser Leu Phe Phe Leu Gly Gln Ala Leu Met Ala Met Leu
          115          120          125
Val Tyr Val Trp Ser Arg Arg Ser Pro Arg Val Arg Val Asn Phe Phe
          130          135          140
Gly Leu Leu Thr Phe Gln Ala Pro Phe Leu Pro Trp Ala Leu Met Gly
145          150          155          160
Phe Ser Leu Leu Leu Gly Asn Ser Ile Leu Val Asp Leu Leu Gly Ile
          165          170          175
Ala Val Gly His Ile Tyr Tyr Phe Leu Glu Asp Val Phe Pro Asn Gln
          180          185          190
Pro Gly Gly Lys Arg Leu Leu Gln Thr Pro Gly Phe Leu Lys Leu Leu
          195          200          205
Leu Asp Ala Pro Ala Glu Asp Pro Asn Tyr Leu Pro Leu Pro Glu Glu
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<210> 6241

<211> 1515

<212> DNA

<213> Homo sapiens

<400> 6241

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240

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<210> 6242

<211> 245

<212> PRT

<213> Homo sapiens

<400> 6242

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 Gly Glu Pro Pro Pro Pro Glu Leu Ala Leu Leu Pro Pro Pro Pro Pro
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 Pro Pro Pro Thr Pro Ala Thr Pro Thr Ser Ser Ala Ser Asn Leu Asp
 65 70 75 80
 Leu Gly Glu Gln Arg Asp Ala Trp Glu Thr Phe Gln Lys Arg Gln Lys
 85 90 95
 Leu Thr Ser Glu Gly Ala Ala Lys Leu Leu Leu Asp Thr Phe Glu Tyr
 100 105 110
 Gln Gly Leu Val Lys His Thr Gly Gly Cys His Cys Gly Ala Val Arg
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 Phe Glu Val Trp Ala Ser Ala Asp Leu His Ile Phe Asp Cys Asn Cys
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 Ser Ile Cys Lys Lys Lys Gln Asn Arg His Phe Ile Val Pro Ala Ser
 145 150 155 160
 Arg Phe Lys Leu Leu Lys Gly Ala Glu His Ile Thr Thr Tyr Thr Phe
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 Asn Thr His Lys Ala Gln His Thr Phe Cys Lys Arg Cys Gly Val Gln
 180 185 190
 Ser Phe Tyr Thr Pro Arg Ser Asn Pro Gly Gly Phe Gly Ile Ala Pro
 195 200 205
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<211> 326

<212> DNA

<213> Homo sapiens

<400> 6243

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<210> 6244

<211> 104

<212> PRT

<213> Homo sapiens

<400> 6244

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      20           25           30
Gly Phe Leu Leu Trp Lys Ala Ile Pro Ser Phe Ala Ser Ser Thr Leu
      35           40           45
Arg Met Ser Ser Ser Leu His Ser Leu Trp Phe Val Pro Leu Val Ser
      50           55           60
Glu Glu Glu Val Leu Ile Ile Leu Ser Gly Ser Glu Cys Ser Thr Cys
65           70           75           80
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Phe Leu Ser Phe Ser Pro Trp Arg
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<210> 6245

<211> 6609

<212> DNA

<213> Homo sapiens

<400> 6245

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960

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<210> 6246

<211> 1286

<212> PRT

<213> Homo sapiens

<400> 6246

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		20					25				30				
Ile	Leu	Ser	Glu	Gln	Lys	Ala	Met	Ile	Asn	Ala	Met	Asp	Ser	Lys	Ile
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Glu Glu Glu Ile Gln	Ala Leu Thr Ala	His Arg Asp Glu	Ile Gln Arg			
	195	200	205			
Lys Phe Asp Ala Leu	Arg Asn Ser Cys	Thr Val Ile Thr	Asp Leu Glu			
	210	215	220			
Glu Gln Leu Asn Gln	Leu Thr Glu Asp	Asn Ala Glu Leu	Asn Asn Gln			
	225	230	235			
Asn Phe Tyr Leu Ser	Lys Gln Leu Asp	Glu Ala Ser Gly	Ala Asn Asp			
	245	250	255			
Glu Ile Val Gln Leu	Arg Ser Glu Val	Asp His Leu Arg	Arg Glu Ile			
	260	265	270			
Thr Glu Arg Glu Met	Gln Leu Thr Ser	Gln Lys Gln Thr	Met Glu Ala			
	275	280	285			
Leu Lys Thr Thr Cys	Thr Met Leu Glu	Glu Gln Val Met	Asp Leu Glu			
	290	295	300			
Ala Leu Asn Asp Glu	Leu Leu Glu Lys	Glu Arg Gln Trp	Glu Ala Trp			
	305	310	315			
Arg Ser Val Leu Gly	Asp Glu Lys Ser	Gln Phe Glu Cys	Arg Val Arg			
	325	330	335			
Glu Leu Gln Arg Met	Leu Asp Thr Glu	Lys Gln Ser Arg	Ala Arg Ala			
	340	345	350			
Asp Gln Arg Ile Thr	Glu Ser Arg Gln	Val Val Glu Leu	Ala Val Lys			
	355	360	365			
Glu His Lys Ala Glu	Ile Leu Ala Leu	Gln Gln Ala Leu	Lys Glu Gln			
	370	375	380			
Lys Leu Lys Ala Glu	Ser Leu Ser Asp	Lys Leu Asn Asp	Leu Glu Lys			
	385	390	395			
Lys His Ala Met Leu	Glu Met Asn Ala	Arg Ser Leu Gln	Gln Lys Leu			
	405	410	415			
Glu Thr Glu Arg Glu	Leu Lys Gln Arg	Leu Leu Glu Glu	Gln Ala Lys			
	420	425	430			
Leu Gln Gln Gln Met	Asp Leu Gln Lys	Asn His Ile Phe	Arg Leu Thr			
	435	440	445			
Gln Gly Leu Gln Glu	Ala Leu Asp Arg	Ala Asp Leu Leu	Lys Thr Glu			
	450	455	460			
Arg Ser Asp Leu Glu	Tyr Gln Leu Glu	Asn Ile Gln Val	Leu Tyr Ser			
	465	470	475			
His Glu Lys Val Lys	Met Glu Gly Thr	Ile Ser Gln Gln	Thr Lys Leu			
	485	490	495			
Ile Asp Phe Leu Gln	Ala Lys Met Asp	Gln Pro Ala Lys	Lys Lys Lys			
	500	505	510			
Val Pro Leu Gln Tyr	Asn Glu Leu Lys	Leu Ala Leu Glu	Lys Glu Lys			
	515	520	525			
Ala Arg Cys Ala Glu	Leu Glu Glu Ala	Leu Gln Lys Thr	Arg Ile Glu			
	530	535	540			
Leu Arg Ser Ala Arg	Glu Glu Ala Ala	His Arg Lys Ala	Thr Asp His			
	545	550	555			
Pro His Pro Ser Thr	Pro Ala Thr Ala	Arg Gln Gln Ile	Ala Met Ser			
	565	570	575			
Ala Ile Val Arg Ser	Pro Glu His Gln	Pro Ser Ala Met	Ser Leu Leu			

			580					585					590			
Ala	Pro	Pro	Ser	Ser	Arg	Arg	Lys	Glu	Ser	Ser	Thr	Pro	Glu	Glu	Phe	
		595					600					605				
Ser	Arg	Arg	Leu	Lys	Glu	Arg	Met	His	His	Asn	Ile	Pro	His	Arg	Phe	
	610					615					620					
Asn	Val	Gly	Leu	Asn	Met	Arg	Ala	Thr	Lys	Cys	Ala	Val	Cys	Leu	Asp	
625					630					635					640	
Thr	Val	His	Phe	Gly	Arg	Gln	Ala	Ser	Lys	Cys	Leu	Glu	Cys	Gln	Val	
				645					650					655		
Met	Cys	His	Pro	Lys	Cys	Ser	Thr	Cys	Leu	Pro	Ala	Thr	Cys	Gly	Leu	
			660					665					670			
Pro	Ala	Glu	Tyr	Ala	Thr	His	Phe	Thr	Glu	Ala	Phe	Cys	Arg	Asp	Lys	
		675					680					685				
Met	Asn	Ser	Pro	Gly	Leu	Gln	Thr	Lys	Glu	Pro	Ser	Ser	Ser	Leu	His	
	690					695					700					
Leu	Glu	Gly	Trp	Met	Lys	Val	Pro	Arg	Asn	Asn	Lys	Arg	Gly	Gln	Gln	
705					710					715					720	
Gly	Trp	Asp	Arg	Lys	Tyr	Ile	Val	Leu	Glu	Gly	Ser	Lys	Val	Leu	Ile	
				725					730					735		
Tyr	Asp	Asn	Glu	Ala	Arg	Glu	Ala	Gly	Gln	Arg	Pro	Val	Glu	Glu	Phe	
			740					745					750			
Glu	Leu	Cys	Leu	Pro	Asp	Gly	Asp	Val	Ser	Ile	His	Gly	Ala	Val	Gly	
		755					760					765				
Ala	Ser	Glu	Leu	Ala	Asn	Thr	Ala	Lys	Ala	Asp	Val	Pro	Tyr	Ile	Leu	
	770					775					780					
Lys	Met	Glu	Ser	His	Pro	His	Thr	Thr	Cys	Trp	Pro	Gly	Arg	Thr	Leu	
785					790					795					800	
Tyr	Leu	Leu	Ala	Pro	Ser	Phe	Pro	Asp	Lys	Gln	Arg	Trp	Val	Thr	Ala	
				805					810					815		
Leu	Glu	Ser	Val	Val	Ala	Gly	Gly	Arg	Val	Ser	Arg	Glu	Lys	Ala	Glu	
			820					825					830			
Ala	Asp	Ala	Lys	Leu	Leu	Gly	Asn	Ser	Leu	Leu	Lys	Leu	Glu	Gly	Asp	
		835					840					845				
Asp	Arg	Leu	Asp	Met	Asn	Cys	Thr	Leu	Pro	Phe	Ser	Asp	Gln	Val	Val	
	850					855					860					
Leu	Val	Gly	Thr	Glu	Glu	Gly	Leu	Tyr	Ala	Leu	Asn	Val	Leu	Lys	Asn	
865					870					875					880	
Ser	Leu	Thr	His	Val	Pro	Gly	Ile	Gly	Ala	Val	Phe	Gln	Ile	Tyr	Ile	
				885					890					895		
Ile	Lys	Asp	Leu	Glu	Lys	Leu	Leu	Met	Ile	Ala	Gly	Glu	Glu	Arg	Ala	
			900					905					910			
Leu	Cys	Leu	Val	Asp	Val	Lys	Lys	Val	Lys	Gln	Ser	Leu	Ala	Gln	Ser	
		915					920					925				
His	Leu	Pro	Ala	Gln	Pro	Asp	Ile	Ser	Pro	Asn	Ile	Phe	Glu	Ala	Val	
	930					935										

1010	1015	1020
Asp Lys Asn Asp His Ser Leu Ala Pro Ala Val Phe Ala Ala Ser Ser		
1025	1030	1035
Asn Ser Phe Pro Val Ser Ile Val Gln Val Asn Ser Ala Gly Gln Arg		1040
	1045	1050
Glu Glu Tyr Leu Leu Cys Phe His Glu Phe Gly Val Phe Val Asp Ser		1055
	1060	1065
Tyr Gly Arg Arg Ser Arg Thr Asp Asp Leu Lys Trp Ser Arg Leu Pro		1070
	1075	1080
Leu Ala Phe Ala Tyr Arg Glu Pro Tyr Leu Phe Val Thr His Phe Asn		1085
	1090	1095
Ser Leu Glu Val Ile Glu Ile Gln Ala Arg Ser Ser Ala Gly Thr Pro		1100
1105	1110	1115
Ala Arg Ala Tyr Leu Asp Ile Pro Asn Pro Arg Tyr Leu Gly Pro Ala		1120
	1125	1130
Ile Ser Ser Gly Ala Ile Tyr Leu Ala Ser Ser Tyr Gln Asp Lys Leu		1135
	1140	1145
Arg Val Ile Cys Cys Lys Gly Asn Leu Val Lys Glu Ser Gly Thr Glu		1150
	1155	1160
His His Arg Gly Pro Ser Thr Ser Arg Ser Ser Pro Asn Lys Arg Gly		1165
	1170	1175
Pro Pro Thr Tyr Asn Glu His Ile Thr Lys Arg Val Ala Ser Ser Pro		1180
1185	1190	1195
Ala Pro Pro Glu Gly Pro Ser His Pro Arg Glu Pro Ser Thr Pro His		1200
	1205	1210
Arg Tyr Arg Glu Gly Arg Thr Glu Leu Arg Arg Asp Lys Ser Pro Gly		1215
	1220	1225
Arg Pro Leu Glu Arg Glu Lys Ser Pro Gly Arg Met Leu Ser Thr Arg		1230
	1235	1240
Arg Glu Arg Ser Pro Gly Arg Leu Phe Glu Asp Ser Ser Arg Gly Arg		1245
	1250	1255
Leu Pro Ala Gly Ala Val Arg Thr Pro Leu Ser Gln Val Asn Lys Val		1260
1265	1270	1275
Trp Asp Gln Ser Ser Val		1280
	1285	

<210> 6247

<211> 497

<212> DNA

<213> Homo sapiens

<400> 6247

gcggccgcag cgctgaatgg ggtggaccga cgttccctgc agcgttcaca aggctggctc
60
tagaagtgct ggagagggcc aagaggaggg cggtggactg gcatgccctg gagcgtccca
120
aaggctgcat gggggtcctt gcccgaggag cgccccacct agagaaacag ccggcagccg
180
gccgcagcgc cgttctcccg ggagagaaat attattcatc tgtgccagag gaaggagggg
240
caacccatgt ctatcgttat cacagaggcg agtcgaagct gcacatgtgc ttggacatag
300
ggaatggtca gagaaaagac agaaaaaaga catcccttgg tcctggaggc agctatcaaa
360

tatcagagca tgctccagag gcatcccagc ctgtgagtac ggaactgctt acgcactggg
 420
 tttcaccacc gttgcaactc catgaaccag ttgacatggt tcttagaggg ctatttgaat
 480
 tgagtctata gtatttt
 497

<210> 6248

<211> 142

<212> PRT

<213> Homo sapiens

<400> 6248

Met	Gly	Trp	Thr	Asp	Val	Pro	Cys	Ser	Val	His	Lys	Ala	Gly	Ser	Arg
1				5					10					15	
Ser	Ala	Gly	Glu	Gly	Gln	Glu	Glu	Gly	Gly	Gly	Leu	Ala	Cys	Pro	Gly
			20					25					30		
Ala	Ser	Gln	Arg	Leu	His	Gly	Gly	Pro	Cys	Pro	Gly	Gly	Ala	Pro	Pro
			35					40					45		
Arg	Glu	Thr	Ala	Gly	Ser	Arg	Pro	Ala	Ala	Arg	Ser	Pro	Gly	Arg	Glu
			50					55				60			
Ile	Leu	Phe	Ile	Cys	Ala	Arg	Gly	Arg	Arg	Gly	Asn	Pro	Cys	Leu	Ser
65					70					75				80	
Leu	Ser	Gln	Arg	Arg	Val	Glu	Ala	Ala	His	Val	Leu	Gly	His	Arg	Glu
				85					90					95	
Trp	Ser	Glu	Lys	Arg	Gln	Lys	Lys	Asp	Ile	Pro	Trp	Ser	Trp	Arg	Gln
			100					105					110		
Leu	Ser	Asn	Ile	Arg	Ala	Cys	Ser	Arg	Gly	Ile	Pro	Ala	Cys	Glu	Tyr
			115					120					125		
Gly	Thr	Ala	Tyr	Ala	Leu	Gly	Phe	Thr	Thr	Val	Ala	Thr	Pro		
			130				135						140		

<210> 6249

<211> 1217

<212> DNA

<213> Homo sapiens

<400> 6249

nntgagcaac aaaccgagtt ctggagaacg ccatcagctc gctgcttaaa ctggaaacaa
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 aagtctcaac ttccaacctc tttgcagcta ggagtggcca agtagcatag atctggtgaa
 120
 tgaactgcag gtgggaattt ctgagaaggt ttccttotta aatagaaaga ttaaaccaca
 180
 gggtccatta tgggtcgact tgatgggaaa gtcacatcc tgacggccgc tgctcagggg
 240
 attggccaag cagctgcctt agcttttgca agagaagggtg ccaaagtcac agccacagac
 300
 attaatgagt ccaaacttca ggaactggaa aagtaccogg gtattcaaac tcgtgtcctt
 360
 gatgtcacia agaagaaaca aattgatcag tttgccaatg aagttgagag acttgatgtt
 420
 ctctttaatg ttgctgggtt tgtccatcat ggaactgtcc tggattgtga ggagaaagac
 480

tgggacttct cgatgaatct caatgtgctc agcatgtacc tgatgatcaa ggcattcctt
 540
 cctaaaatgc ttgtcagaa atctggcaat attatcaaca tgtcttctgt ggcttccagc
 600
 gtcaaaggag ttgtgaacag atgtgtgtac agcacaacca aggcagccgt gattggcctc
 660
 acaaaatctg tggctgcaga tttcatccag cagggcatca ggtgcaactg tgtgtgcca
 720
 ggaacagttg atacgccatc tctacaagaa agaatacaag ccagaggaaa tcctgaagag
 780
 gcacggaatg atttcctgaa gagacaaaag acgggaagat tcgcaactgc agaagaaata
 840
 gccatgctct gcgtgtatct ggcttctgat gaatctgctt atgtaactgg taaccctgtc
 900
 atcattgatg gaggctggag cttgtgattt taggatctcc atggtgggaa ggaaggcagg
 960
 ccttctctat ccacagtga cctggttacg aagaaaactc accaatcatc tccttctgt
 1020
 taatcacatg ttaatgaaaa taagctcttt ttaatgatgt cactgtttgc aagagtctga
 1080
 ttctttaagt atattaatct ctttgaatc tcttctgaaa tcattgtaaa gaaataaaaa
 1140
 tattgaactc atagcaggag aatagttttt aaaataaatc tcgatttggt agcaaaaaaa
 1200
 aaaaaaaaaa aaaaaaa
 1217

<210> 6250

<211> 245

<212> PRT

<213> Homo sapiens

<400> 6250

Met	Gly	Arg	Leu	Asp	Gly	Lys	Val	Ile	Ile	Leu	Thr	Ala	Ala	Ala	Gln
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Gly	Ile	Gly	Gln	Ala	Ala	Ala	Leu	Ala	Phe	Ala	Arg	Glu	Gly	Ala	Lys
			20				25					30			
Val	Ile	Ala	Thr	Asp	Ile	Asn	Glu	Ser	Lys	Leu	Gln	Glu	Leu	Glu	Lys
		35				40				45					
Tyr	Pro	Gly	Ile	Gln	Thr	Arg	Val	Leu	Asp	Val	Thr	Lys	Lys	Lys	Gln
	50				55			60							
Ile	Asp	Gln	Phe	Ala	Asn	Glu	Val	Glu	Arg	Leu	Asp	Val	Leu	Phe	Asn
65				70				75					80		
Val	Ala	Gly	Phe	Val	His	His	Gly	Thr	Val	Leu	Asp	Cys	Glu	Glu	Lys
			85					90					95		
Asp	Trp	Asp	Phe	Ser	Met	Asn	Leu	Asn	Val	Arg	Ser	Met	Tyr	Leu	Met
		100					105					110			
Ile	Lys	Ala	Phe	Leu	Pro	Lys	Met	Leu	Ala	Gln	Lys	Ser	Gly	Asn	Ile
	115					120					125				
Ile	Asn	Met	Ser	Ser	Val	Ala	Ser	Ser	Val	Lys	Gly	Val	Val	Asn	Arg
	130					135				140					
Cys	Val	Tyr	Ser	Thr	Thr	Lys	Ala	Ala	Val	Ile	Gly	Leu	Thr	Lys	Ser
145				150					155					160	
Val	Ala	Ala	Asp	Phe	Ile	Gln	Gln	Gly	Ile	Arg	Cys	Asn	Cys	Val	Cys

					165						170						175
Pro	Gly	Thr	Val	Asp	Thr	Pro	Ser	Leu	Gln	Glu	Arg	Ile	Gln	Ala	Arg		
					180						185						190
Gly	Asn	Pro	Glu	Glu	Ala	Arg	Asn	Asp	Phe	Leu	Lys	Arg	Gln	Lys	Thr		
					195						200						205
Gly	Arg	Phe	Ala	Thr	Ala	Glu	Glu	Ile	Ala	Met	Leu	Cys	Val	Tyr	Leu		
					210						215						220
Ala	Ser	Asp	Glu	Ser	Ala	Tyr	Val	Thr	Gly	Asn	Pro	Val	Ile	Ile	Asp		
					225						230						235
Gly	Gly	Trp	Ser	Leu													
					245												

<210> 6251

<211> 1611

<212> DNA

<213> Homo sapiens

<400> 6251

60	tttttttttt	tttttttttt	tttttttttt	tttttttttt	ttttccagat	caggaagttt
120	tattgtctgac	atgcaggaag	agtcccatg	tagtacaaaa	atatgtcttt	atacaaactt
180	ttttgtgact	ttttccgttt	ctttacaata	ggacttctct	cagtgtgtga	caccctagtga
240	gggctgaccc	atcctcctct	cctttgcttc	accaggaatg	tcatcagaca	catggcttga
300	ccttggaagg	gcccagtcctg	tctgacaggg	ctttgcagac	ccggcggcta	ttgctttgaa
360	aaggaggaga	aagaccacgc	acgggcagca	gcctggaggg	acccggtggg	ctgctgagag
420	ggggctccgc	tgcgacgggc	cctggcccag	cttcaggccc	tcacaggagg	acagtcaagg
480	gctgggagcc	ctaggccgga	ctgcatttcc	gctccgcag	gagactttct	atgaaataaa
540	tatagaaaag	agggcacccc	ccagcccccac	agcacaagac	cctggccctc	agcgctggac
600	agctgagaca	gacgcaggct	cgctgctcag	ggggagtaag	tgctgggctc	cagtaggctc
660	ccacaggccc	actgaggcag	aggcatgagt	cgcccaagtg	ctggatgggg	catggggaga
720	aaggggcgtg	ggcagccctg	ctactgctgg	caagaggttg	ccccattttt	tccagatggg
780	gaaactgagg	cacaaggagg	tttggaact	tgcccaaggt	cactcacagt	gagtcagctt
840	tttaggggga	ggagagcggc	tcacactctg	ggaaacacag	tcacctcccc	actggggagc
900	agggccaggc	aggagggggc	tcaggggcca	tgactgcctg	gaggggacac	tcagcctctc
960	tgaggacata	tggggggtag	gcctctgggg	aagggtcttt	gcttggcatc	aggcagggcc
1020	aagtcagta	agggcaaggg	gagggggcat	tctggtgaga	acagcatttc	tggcaagacg
1080	ggcatccact	tcaaaatctc	ggctcaaaag	ggcagcaggg	ctgttctcaa	gccaggcagg

cagggtcccc caatccctac aattctcctg agtccctcac caccatggag gacccttgct
 1140
 aggggtctacc gggagagtca ccacatctat tatgaggcaa gggcactggg atatgttccc
 1200
 accatccctt aaacacaaga gtaggctagg ggagcgtgca ggcagcccc gctcacggcc
 1260
 aggcctgcag cccaacccat gggccccctt gcactgggag tccacgtgag ctcaagtacca
 1320
 cggggaagga tagagaaggg aacagggttaa cgcgcggtga cagcacctca gagaagccac
 1380
 tgagacggga gagaagagc cagggtctaga aaggcctccc atcaccggca gcagagaggg
 1440
 actggtgggc tgaaagggga cagggactgg caggaggggc ttccctgcct gggggtgagg
 1500
 agggagctca cgtgtgggct gtggattcct tgctgtccag ccaggctggg ggcagggagt
 1560
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 1611

<210> 6252

<211> 100

<212> PRT

<213> Homo sapiens

<400> 6252

Met	Gly	Gly	Arg	Pro	Leu	Gly	Lys	Gly	Leu	Cys	Leu	Ala	Ser	Gly	Arg
1				5				10						15	
Ala	Lys	Ser	Ser	Lys	Gly	Lys	Gly	Arg	Gly	His	Ser	Gly	Glu	Asn	Ser
			20					25					30		
Ile	Ser	Gly	Lys	Thr	Gly	Ile	His	Phe	Lys	Ile	Ser	Ala	Gln	Lys	Gly
		35					40					45			
Ser	Arg	Ala	Val	Leu	Lys	Pro	Gly	Arg	Gln	Gly	Pro	Pro	Ile	Pro	Thr
		50				55					60				
Ile	Leu	Leu	Ser	Pro	Ser	Pro	Pro	Trp	Arg	Thr	Leu	Ala	Arg	Val	Tyr
65					70				75					80	
Arg	Glu	Ser	His	His	Ile	Tyr	Tyr	Glu	Ala	Arg	Ala	Leu	Gly	Tyr	Val
				85				90						95	
Pro	Thr	Ile	Pro												
															100

<210> 6253

<211> 1953

<212> DNA

<213> Homo sapiens

<400> 6253

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 cggtcccgag cggcggcggc ccggttccg ctgcccgtga gctaaggacg gtccgctccc
 120
 tctagccagc tccgaatcct gatccaggcg ggggccaggg gcccctcgcc tcccctctga
 180
 ggaccgaaga tgagcttcct cttcagcagc cgctcttcta aaacattcaa accaaagaag
 240

aatatccctg aaggatctca tcagtatgaa ctcttaaaac atgcagaagc aactctagga
300
agtgggaatc tgagacaagc tggttatgtt cctgagggag aggatctcaa tgaatggatt
360
gctgtgaaca ctgtggattt cttaaccag atcaacatgt tatatggaac tattacagaa
420
ttctgcactg aagcaagctg tccagtcatt tctgcaggtc cgagatatga atatcactgg
480
gcagatggta ctaatatata aaagccaatc aaatgttctg caccaaaata cattgactat
540
ttgatgactt gggttcaaga tcagcttgat gatgaaactc tttttccttc taagattggg
600
gtcccatttc ccaaaaactt tatgtctgtg gcaaagacta ttctaaagcg tctgttcagg
660
gtttatgccc atatttatca ccagcacttt gattctgtga tgcagctgca agaggaggcc
720
cacctcaaca cctcctttta gcactttatt ttctttgttc aggagttaa tctgattgat
780
aggcgtgagc tggcacctct tcaagaatta atagagaaac ttggatcaa agacagataa
840
atgtttcttc tagaacacag ttacccctt gttcatcta ttgctagaac tatctcattg
900
ctatctgtta tagactagt atacaaactt taagaaaaca ggataaaaag ataccattg
960
cctgtgtcta ctgataaaat tatcccaaag gtaggttggg gtgatagttt ccgagtaaga
1020
ccttaaggac acagccaaat ctttaagtact gtgtgaccac tcttgttgtt atcacatagt
1080
catacttggg tgtaatatgt gatggttaac ctgtagctta taaatttact tattattctt
1140
ttactcattt actcagtcatt ttctttacaa gaaaatgatt gaatctgtt taggtgacag
1200
cacaatggac attaagaatt tccatcaata atttatgaat aagtttccag aacaaatttc
1260
ctaataacac aatcagattg gttttattct tttattttac gaataaaaaa tgtatttttc
1320
agtacccttg agatttagaa catctgtgtc acttcagata acattttagt ttcaagtttg
1380
tatggtagtg tttttataga taagatacgt ctattttttc aaaattcatg attgcagttt
1440
aaatcatcat atgacgtgtg ggtgggagca accaaagtta tttttacagg gactttattt
1500
tttgatcttt atttgagatt gttttcatat ctatctaaat tattaggagt gtgtgtatca
1560
gaagtaattt tttaatgtct tctaaggatg gtcttcagg cttttaaaact gaaaagctta
1620
attcagatag tagcttttgg ctgagaaaag gaatccaaaa tattaataaa tttagatctc
1680
aaaaccacta tttttattat ttcattattt ttcagaggcc ttaaaattct gggttaagaga
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atggaggaaa atactcagag tacttgatta ttttatttcc ttttattaaa aaattacttc
1800
tatgttttta ttgtctcttg agccttagtt aagagtagtg tagaaatgca tgaacttcatt
1860

cctaataagg ataaaactta aggaaaacca caataaacca tgaagggtga cacatcttaa
 1920
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa
 1953

<210> 6254
 <211> 216
 <212> PRT
 <213> Homo sapiens

<400> 6254
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 Glu Ala Thr Leu Gly Ser Gly Asn Leu Arg Gln Ala Val Met Leu Pro
 35 40 45
 Glu Gly Glu Asp Leu Asn Glu Trp Ile Ala Val Asn Thr Val Asp Phe
 50 55 60
 Phe Asn Gln Ile Asn Met Leu Tyr Gly Thr Ile Thr Glu Phe Cys Thr
 65 70 75 80
 Glu Ala Ser Cys Pro Val Met Ser Ala Gly Pro Arg Tyr Glu Tyr His
 85 90 95
 Trp Ala Asp Gly Thr Asn Ile Lys Lys Pro Ile Lys Cys Ser Ala Pro
 100 105 110
 Lys Tyr Ile Asp Tyr Leu Met Thr Trp Val Gln Asp Gln Leu Asp Asp
 115 120 125
 Glu Thr Leu Phe Pro Ser Lys Ile Gly Val Pro Phe Pro Lys Asn Phe
 130 135 140
 Met Ser Val Ala Lys Thr Ile Leu Lys Arg Leu Phe Arg Val Tyr Ala
 145 150 155 160
 His Ile Tyr His Gln His Phe Asp Ser Val Met Gln Leu Gln Glu Glu
 165 170 175
 Ala His Leu Asn Thr Ser Phe Lys His Phe Ile Phe Phe Val Gln Glu
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 Phe Asn Leu Ile Asp Arg Arg Glu Leu Ala Pro Leu Gln Glu Leu Ile
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<213> Homo sapiens

<400> 6256

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			20					25					30		
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Asn	Ile	Met	Gly	Gly	Lys	Glu	Gln	Asn	Ser	Pro	Ile	Tyr	Ile	Ser	Arg
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Val	Ile	Pro	Gly	Gly	Val	Ala	Asp	Arg	His	Gly	Gly	Leu	Lys	Arg	Gly
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				85				90						95	
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			100					105					110		
Val	Val	Arg	Tyr	Thr	Pro	Arg	Val	Leu	Glu	Glu	Met	Glu	Ala	Arg	Phe
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<212> PRT

<213> Homo sapiens

<400> 6258

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		35					40					45			
Ala	Ile	Phe	Ser	Leu	Ser	Ser	Ala	Leu	Ser	Ser	Glu	Ala	Lys	Glu	Glu
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Ser	Met	Val	Ser	Thr	Asp	Arg	His	Leu	Leu	Ser	Ala	Gly	Asp	Gly	Glu
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	290		295		300										
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<212> DNA

<213> Homo sapiens

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35

40

45

Arg Val Lys Ala Lys Gln Lys Pro Leu Ile Ser Asn Ser His Thr Asp

50

55

60

His Leu Met Gly Cys Thr Lys Ser Ala Glu Pro Gly Thr Glu Thr Ser

65

70

75

80

Gln Val Asn Ser Phe Ser Asp Leu Lys Ala Ser Thr Leu Val His Lys

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90

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<212> PRT

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<211> 2508

<212> DNA

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<210> 6264

<211> 654

<212> PRT

<213> Homo sapiens

<400> 6264

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Cys	Thr	Gly	Ile	Glu	Asn	Ile	Asp	Glu	Ala	Ile	Thr	Leu	Leu	Glu	Gln	20	25	30	
Asn	Asn	Trp	Asp	Leu	Val	Ala	Ala	Ile	Asn	Gly	Val	Ile	Pro	Gln	Glu	35	40	45	
Asn	Gly	Ile	Leu	Gln	Ser	Glu	Tyr	Gly	Gly	Glu	Thr	Ile	Pro	Gly	Pro	50	55	60	
Ala	Phe	Asn	Pro	Ala	Ser	His	Pro	Ala	Ser	Ala	Pro	Thr	Ser	Ser	Ser	65	70	75	80
Ser	Ser	Ala	Phe	Arg	Pro	Val	Met	Pro	Ser	Arg	Gln	Ile	Val	Glu	Arg	85	90	95	
Gln	Pro	Arg	Met	Leu	Asp	Phe	Arg	Val	Glu	Tyr	Arg	Asp	Arg	Asn	Val	100	105	110	
Asp	Val	Val	Leu	Glu	Asp	Thr	Cys	Thr	Val	Gly	Glu	Ile	Lys	Gln	Ile	115	120	125	
Leu	Glu	Asn	Glu	Leu	Gln	Ile	Pro	Val	Ser	Lys	Met	Leu	Leu	Lys	Gly	130	135	140	
Trp	Lys	Thr	Gly	Asp	Val	Glu	Asp	Ser	Thr	Val	Leu	Lys	Ser	Leu	His	145	150	155	160
Leu	Pro	Lys	Asn	Asn	Ser	Leu	Tyr	Val	Leu	Thr	Pro	Asp	Leu	Pro	Pro	165	170	175	
Pro	Ser	Ser	Ser	Ser	His	Ala	Gly	Ala	Leu	Gln	Glu	Ser	Leu	Asn	Gln	180	185	190	
Asn	Phe	Met	Leu	Ile	Ile	Thr	His	Arg	Glu	Val	Gln	Arg	Glu	Tyr	Asn	195	200	205	
Leu	Asn	Phe	Ser	Gly	Ser	Ser	Thr	Ile	Gln	Glu	Val	Lys	Arg	Asn	Val	210	215	220	
Tyr	Asp	Leu	Thr	Ser	Ile	Pro	Val	Arg	His	Gln	Leu	Trp	Glu	Gly	Trp	225	230	235	240
Pro	Thr	Ser	Ala	Thr	Asp	Asp	Ser	Met	Cys	Leu	Ala	Glu	Ser	Gly	Leu	245	250	255	
Ser	Tyr	Pro	Cys	His	Arg	Leu	Thr	Val	Gly	Arg	Arg	Ser	Ser	Pro	Ala	260	265	270	
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Asp Asp Gly Glu Val Phe Gly Met Ala Ser Ser Ala Leu Arg Lys Ser
305      310      315      320
Pro Met Ile Cys Phe Leu Val Pro Glu Asn Ala Glu Asn Glu Gly Asp
      325      330      335
Ala Leu Leu Gln Phe Thr Ala Glu Phe Ser Ser Arg Tyr Gly Asp Cys
      340      345      350
His Pro Val Phe Phe Ile Gly Ser Leu Glu Ala Ala Phe Gln Glu Ala
      355      360      365
Phe Tyr Val Lys Ala Arg Asp Arg Lys Leu Leu Ala Ile Tyr Leu His
      370      375      380
His Asp Glu Ser Val Leu Thr Asn Val Phe Cys Ser Gln Met Leu Cys
385      390      395      400
Ala Glu Ser Ile Val Ser Tyr Leu Ser Gln Asn Phe Ile Thr Trp Ala
      405      410      415
Trp Asp Leu Thr Lys Asp Ser Asn Arg Ala Arg Phe Leu Thr Met Cys
      420      425      430
Asn Arg His Phe Gly Ser Val Val Ala Gln Thr Ile Arg Thr Gln Lys
      435      440      445
Thr Asp Gln Phe Pro Leu Phe Leu Ile Ile Met Gly Lys Arg Ser Ser
      450      455      460
Asn Glu Val Leu Asn Val Ile Gln Gly Asn Thr Thr Val Asp Glu Leu
465      470      475      480
Met Met Arg Leu Met Ala Ala Met Glu Ile Phe Thr Ala Gln Gln Gln
      485      490      495
Glu Asp Ile Lys Asp Glu Asp Glu Arg Glu Ala Arg Glu Asn Val Lys
      500      505      510
Arg Glu Gln Asp Glu Ala Tyr Arg Leu Ser Leu Glu Ala Asp Arg Ala
      515      520      525
Lys Arg Glu Ala His Glu Arg Glu Met Ala Glu Gln Phe Arg Leu Glu
      530      535      540
Gln Ile Arg Lys Glu Gln Glu Glu Arg Glu Ala Ile Arg Leu Ser
545      550      555      560
Leu Glu Gln Ala Leu Pro Pro Glu Pro Lys Glu Glu Asn Ala Glu Pro
      565      570      575
Val Ser Lys Leu Arg Ile Arg Thr Pro Ser Gly Glu Phe Leu Glu Arg
      580      585      590
Arg Phe Leu Ala Ser Asn Lys Leu Gln Ile Val Phe Asp Phe Val Ala
      595      600      605
Ser Lys Gly Phe Pro Trp Asp Glu Tyr Lys Leu Leu Ser Thr Phe Pro
      610      615      620
Arg Arg Asp Val Thr Gln Leu Asp Pro Asn Lys Ser Leu Leu Glu Val
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Lys Leu Phe Pro Gln Glu Thr Leu Phe Leu Glu Ala Lys Glu
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<210> 6265

<211> 1344

<212> DNA

<213> Homo sapiens

<400> 6265

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420
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480
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780
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<210> 6266

<211> 240

<212> PRT

<213> Homo sapiens

<400> 6266

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	20	25	30
Ser Pro Asp Asp Lys Glu Phe Gln Ser Val Glu Glu Glu Met Gln Ser			
	35	40	45
Thr Val Arg Glu His Arg Asp Gly Gly His Ala Gly Gly Ile Phe Asn			
	50	55	60
Arg Tyr Asn Ile Leu Lys Ile Gln Lys Val Cys Asn Lys Lys Leu Trp			
65	70	75	80
Glu Arg Tyr Thr His Arg Arg Lys Glu Val Ser Glu Glu Asn His Asn			
	85	90	95
His Ala Asn Glu Arg Met Leu Phe His Gly Ser Pro Phe Val Asn Ala			
	100	105	110
Ile Ile His Lys Gly Phe Asp Glu Arg His Ala Tyr Ile Gly Gly Met			
	115	120	125
Phe Gly Ala Gly Ile Tyr Phe Ala Glu Asn Ser Ser Lys Ser Asn Gln			
130	135	140	
Tyr Val Tyr Gly Ile Gly Gly Gly Thr Gly Cys Pro Val His Lys Asp			
145	150	155	160
Arg Ser Cys Tyr Ile Cys His Arg Gln Leu Leu Phe Cys Arg Val Thr			
	165	170	175
Leu Gly Lys Ser Phe Leu Gln Phe Ser Ala Met Lys Met Ala His Ser			
	180	185	190
Pro Pro Gly His His Ser Val Thr Gly Arg Pro Ser Val Asn Gly Leu			
	195	200	205
Ala Leu Ala Glu Tyr Val Ile Tyr Arg Gly Glu Gln Ala Tyr Pro Glu			
	210	215	220
Tyr Leu Ile Thr Tyr Gln Ile Met Arg Pro Glu Gly Met Val Asp Gly			
225	230	235	240

<210> 6267

<211> 328

<212> DNA

<213> Homo sapiens

<400> 6267

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120

gatgagcctt tcctgcagtt ccgaaggaac gtgttcttcc caaagcggcg ggagctccag
180

atccatgacg aggaggtcct gcggtctctc tatgaggagg ccaagggcaa cgtgctggct
240

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328

<210> 6268

<211> 83

<212> PRT

<213> Homo sapiens

<400> 6268

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 Leu Gln Ile His Asp Glu Glu Val Leu Arg Leu Leu Tyr Glu Glu Ala
 35 40 45
 Lys Gly Asn Val Leu Ala Ala Arg Tyr Pro Cys Asp Val Glu Asp Cys
 50 55 60
 Glu Ala Leu Gly Ala Leu Val Cys Arg Val Gln Leu Gly Pro Tyr Gln
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<210> 6269

<211> 923

<212> DNA

<213> Homo sapiens

<400> 6269

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<210> 6270

<211> 307
 <212> PRT
 <213> Homo sapiens

<400> 6270

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Glu Glu Leu Ile His Gln Leu Arg Asn Val Met Val Leu Gln Asp Glu
          35           40           45
Asn Phe Val Ser Lys Glu Glu Phe Gln Ala Val Glu Lys Lys Leu Val
          50           55           60
Glu Glu Lys Ala Ala His Ala Lys Thr Lys Val Leu Leu Ala Lys Glu
65          70          75          80
Glu Glu Lys Leu Gln Phe Ala Leu Gly Glu Val Glu Val Leu Ser Lys
          85          90          95
Gln Leu Glu Lys Glu Lys Leu Ala Phe Glu Lys Ala Leu Ser Ser Val
          100         105         110
Lys Ser Lys Val Leu Gln Glu Ser Lys Lys Asp Gln Leu Ile Thr
          115         120         125
Lys Cys Asn Glu Ile Glu Ser His Ile Ile Lys Gln Glu Asp Ile Leu
          130         135         140
Asn Gly Lys Glu Asn Glu Ile Lys Glu Leu Gln Gln Val Ile Ser Gln
145         150         155         160
Gln Lys Gln Ile Phe Ser Pro Pro Pro Ala Gly Ser Val Ala Gly Ile
          165         170         175
Thr Cys Leu Thr Ser Gly Ser Arg Ser Ser Arg Lys Ala Thr Trp Pro
          180         185         190
Arg Cys Trp Thr Arg Ser Ile Arg Lys Pro Gln Gly His Val Arg Pro
          195         200         205
Ala Ala Thr Ser Ile Pro Gly Lys Asn Lys Met Ala Ala Ala Phe Leu
          210         215         220
Phe Ser Gly Cys Asn Pro Gln Pro Leu Pro Ser Leu Leu Trp Glu Ser
225         230         235         240
Pro Ala Ser Ser Pro Cys Tyr Phe Pro Pro Ser Trp Ile Val Val Gly
          245         250         255
Val His Lys Val Gly Ala Cys Ser Leu Gly Glu Glu Leu Gly Leu Cys
          260         265         270
Cys Leu Val Gly Thr Thr Ala Ser Phe Gly Tyr Leu Ile Pro Ser Tyr
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Ile Asn Ser Pro Gly Tyr Pro Val Ile Phe His Pro Thr Pro Ser Val
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Leu Val Asn
305

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<210> 6271
 <211> 1437
 <212> DNA
 <213> Homo sapiens

<400> 6271

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<210> 6272

<211> 296

<212> PRT

<213> Homo sapiens

<400> 6272

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Leu	Glu	Val	Ile
35	40	45	
Thr	Val	Tyr	Tyr
50	55	60	
Met	Val	Arg	Pro
65	70	75	
Ala	Val	Tyr	Phe
85	90	95	
Ile	Phe	Val	Pro
100	105	110	
Ala	Ala	Phe	Ile
115	120	125	
Thr	Arg	Met	Gln
130	135	140	
Thr	Leu	Gln	Cys
145	150	155	
Phe	Tyr	Arg	Gly
165	170	175	
Ile	Cys	Phe	Ala
180	185	190	
Pro	Leu	Ala	Ser
195	200	205	
Phe	Gly	Leu	Met
210	215	220	
Ile	Ala	Tyr	Pro
225	230	235	
Thr	Lys	Tyr	Lys
245	250	255	
Glu	Gly	Tyr	Leu
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Gln	Ile	Pro	Asn
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Tyr	Leu	Leu	Glu
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<210> 6273

<211> 2355

<212> DNA

<213> Homo sapiens

<400> 6273

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<211> 70

<212> PRT

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<400> 6274

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<212> DNA

<213> Homo sapiens

<400> 6275

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<211> 172

<212> PRT

<213> Homo sapiens

<400> 6276

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		20					25						30		
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<212> DNA

<213> Homo sapiens

<400> 6277

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<210> 6278

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<212> PRT

<213> Homo sapiens

<400> 6278

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 His Gly Leu Arg His Gly Asp Phe Gln Arg Tyr Arg Gly Tyr Cys Ser
 65 70 75 80
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 Arg His Lys Phe Thr Gly Lys Lys Val Thr Glu Glu Leu Leu Thr Asp
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 115 120 125
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<211> 162

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

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 Ala Ser Val Ile Ser Gly Ile Asn Glu Lys Leu Phe Phe Ser Leu Lys
 50 55 60
 Asn Thr Thr Arg Pro Tyr His Ser Leu Pro Ser Glu Ala Val Phe Ala
 65 70 75 80
 Asn Ser Thr Gly Met Leu Val Val Ala Phe Gly Leu Leu Val Leu Tyr
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<211> 57

<212> PRT

<213> Homo sapiens

<400> 6286

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<211> 1674

<212> DNA

<213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

<400> 6288

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          35           40           45
Ser Val Lys Leu Asp Glu His Ile Ile Pro Leu Gly Ser Met Ala Ile
          50           55           60
Asn Ser Ile Ser Lys Leu Thr Gln Leu Thr Gln Ser Ser Met Tyr Ser
65           70           75           80
Leu Pro Asn Ala Pro Thr Leu Ala Asp Leu Glu Asp Asp Thr His Glu
          85           90           95
Ala Ser Asp Asp Gln Pro Glu Lys Pro His Phe Asp Ser Arg Ser Val
          100          105          110
Ile Phe Glu Leu Asp Ser Cys Asn Gly Ser Gly Lys Val Cys Leu Val
          115          120          125
Tyr Lys Ser Gly Lys Pro Ala Leu Ala Glu Asp Thr Glu Ile Trp Phe
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Leu Asp Arg Ala Leu Tyr Trp His Phe Leu Thr Asp Thr Phe Thr Ala
145          150          155          160
Tyr Tyr Arg Leu Leu Ile Thr His Leu Gly Leu Pro Gln Trp Gln Tyr
          165          170          175
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          180          185          190
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          195          200          205
Asp Ser Phe Val Asn Lys Leu Asp Pro Ser Lys Val Phe Lys Ser Lys
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Asn Lys Ile Val Ile Pro Lys Lys Lys Gly Pro Val Gln Pro Ala Gly
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<400> 6289

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<212> PRT

<213> Homo sapiens

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			20					25					30		
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				85					90					95	
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<211> 2718

<212> DNA

<213> Homo sapiens

<400> 6291

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<212> PRT

<213> Homo sapiens

<400> 6292

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Pro	Ala	His	Phe	Ser	Asp	Ser	Ala	Gln	Thr	Glu	Ala	Cys	Tyr	His	Met	20	25	30	
Leu	Ser	Arg	Pro	Gln	Pro	Pro	Pro	Asp	Pro	Leu	Leu	Leu	Gln	Arg	Leu	35	40	45	
Pro	Arg	Pro	Ser	Ser	Leu	Ser	Asp	Lys	Thr	Gln	Leu	His	Ser	Arg	Trp	50	55	60	
Leu	Asp	Ser	Ser	Arg	Cys	Leu	Met	Gln	Gln	Gly	Ile	Lys	Ala	Gly	Asp	65	70	75	80
Ala	Leu	Trp	Leu	Arg	Phe	Lys	Tyr	Tyr	Ser	Phe	Phe	Asp	Leu	Asp	Pro	85	90	95	
Lys	Thr	Asp	Pro	Val	Arg	Leu	Thr	Gln	Leu	Tyr	Glu	Gln	Ala	Arg	Trp	100	105	110	
Asp	Leu	Leu	Leu	Glu	Glu	Ile	Asp	Cys	Thr	Glu	Glu	Glu	Met	Met	Val	115	120	125	
Phe	Ala	Ala	Leu	Gln	Tyr	His	Ile	Asn	Lys	Leu	Ser	Gln	Ser	Gly	Glu	130	135	140	
Val	Gly	Glu	Pro	Ala	Gly	Thr	Asp	Pro	Gly	Leu	Asp	Asp	Leu	Asp	Val	145	150	155	160
Ala	Leu	Ser	Asn	Leu	Glu	Val	Lys	Leu	Glu	Gly	Ser	Ala	Pro	Thr	Asp	165	170	175	
Val	Leu	Asp	Ser	Leu	Thr	Thr	Ile	Pro	Glu	Leu	Lys	Asp	Tyr	Leu	Arg	180	185	190	
Ile	Phe	Arg	Pro	Arg	Lys	Leu	Thr	Leu	Lys	Gly	Tyr	Arg	Gln	His	Trp	195	200	205	
Val	Val	Phe	Lys	Glu	Thr	Thr	Leu	Ser	Tyr	Tyr	Lys	Ser	Gln	Asp	Glu	210	215	220	
Ala	Pro	Gly	Asp	Pro	Ile	Gln	Gln	Leu	Asn	Leu	Lys	Gly	Cys	Glu	Val	225	230	235	240
Val	Pro	Asp	Val	Asn	Val	Ser	Gly	Gln	Lys	Phe	Cys	Ile	Lys	Leu	Leu	245	250	255	
Val	Pro	Ser	Pro	Glu	Gly	Met	Ser	Glu	Ile	Tyr	Leu	Arg	Cys	Gln	Asp	260	265	270	
Glu	Gln	Gln	Tyr	Ala	Arg	Trp	Met	Ala	Gly	Cys	Arg	Leu	Ala	Ser	Lys	275	280	285	
Gly	Arg	Thr	Met	Ala	Asp	Ser	Ser	Tyr	Thr	Ser	Glu	Val	Gln	Ala	Ile	290	295	300	
Leu	Ala	Phe	Leu	Ser	Leu	Gln	His	Gly	Gln	Trp	Gly	Pro	Arg	Gln	Pro	305	310	315	320
Pro	Pro	Arg	Pro	Asp	Ala	Ser	Ala	Glu	Gly	Leu	Asn	Pro	Tyr	Gly	Leu	325	330	335	
Val	Ala	Pro	Arg	Phe	Gln	Arg	Lys	Phe	Lys	Ala	Lys	Gln	Leu	Thr	Pro				

340 345 350
 Arg Ile Leu Glu Ala His Gln Asn Val Ala Gln Leu Ser Leu Ala Glu
 355 360 365
 Ala Gln Leu Arg Phe Ile Gln Ala Trp Gln Ser Leu Pro Asp Phe Gly
 370 375 380
 Ile Ser Tyr Val Met Val Arg Phe Lys Gly Ser Arg Lys Asp Glu Ile
 385 390 395 400
 Leu Gly Ile Ala Asn Asn Arg Leu Ile Arg Ile Asp Leu Ala Val Gly
 405 410 415
 Asp Val Val Lys Thr Trp Arg Phe Ser Asn Met Arg Gln Trp Asn Val
 420 425 430
 Asn Trp Asp Ile Arg Gln Val Ala Ile Glu Phe Asp Glu His Ile Asn
 435 440 445
 Val Ala Phe Ser Cys Val Ser Ala Ser Cys Arg Ile Val His Glu Tyr
 450 455 460
 Ile Gly Gly Tyr Ile Phe Leu Ser Thr Arg Glu Arg Ala Arg Gly Glu
 465 470 475 480
 Glu Leu Asp Glu Asp Leu Phe Leu Gln Leu Thr Gly Gly His Glu Ala
 485 490 495
 Phe

<210> 6293

<211> 750

<212> DNA

<213> Homo sapiens

<400> 6293

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 120
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 180
 tcgcagaagt cccgggcaga gctggtgggg cagcttcaga ggctgggatt tgacatctct
 240
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 300
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 360
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 420
 aacgccttcc aggtgctcat ggagctggaa aaacctgtgc tcatatcact gggaaaaggg
 480
 cggtactaca aggagacctc tggcctgatg ctggacgttg gtccctacat gaaggcgctt
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 600
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 660
 gtgggacgacg tcggcggtgc ccagcgggtg ggaatgagag cgctgcaggt gcgcaccggg
 720
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 750

<210> 6294
 <211> 250
 <212> PRT
 <213> Homo sapiens

<400> 6294
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 Gly Gly Thr Ala Ile Ala Gly Ser Val Glu Ala Val Ala Arg Leu Lys
 35 40 45
 Arg Ser Arg Leu Lys Val Arg Phe Cys Thr Asn Glu Ser Gln Lys Ser
 50 55 60
 Arg Ala Glu Leu Val Gly Gln Leu Gln Arg Leu Gly Phe Asp Ile Ser
 65 70 75 80
 Glu Gln Glu Val Thr Ala Pro Ala Pro Ala Ala Cys Gln Ile Leu Lys
 85 90 95
 Glu Arg Gly Leu Arg Pro Tyr Leu Leu Ile His Asp Gly Val Arg Ser
 100 105 110
 Glu Phe Asp Gln Ile Asp Thr Ser Asn Pro Asn Cys Val Val Ile Ala
 115 120 125
 Asp Ala Gly Glu Ser Phe Ser Tyr Gln Asn Met Asn Asn Ala Phe Gln
 130 135 140
 Val Leu Met Glu Leu Glu Lys Pro Val Leu Ile Ser Leu Gly Lys Gly
 145 150 155 160
 Arg Tyr Tyr Lys Glu Thr Ser Gly Leu Met Leu Asp Val Gly Pro Tyr
 165 170 175
 Met Lys Ala Leu Glu Tyr Ala Cys Gly Ile Lys Ala Glu Val Val Gly
 180 185 190
 Lys Pro Ser Pro Glu Phe Phe Lys Ser Ala Leu Gln Ala Ile Gly Val
 195 200 205
 Glu Ala His Gln Ala Val Met Ile Gly Asp Asp Ile Val Gly Asp Val
 210 215 220
 Gly Gly Ala Gln Arg Cys Gly Met Arg Ala Leu Gln Val Arg Thr Gly
 225 230 235 240
 Lys Phe Arg Pro Ser Asp Glu His His Pro
 245 250

<210> 6295
 <211> 2091
 <212> DNA
 <213> Homo sapiens

<400> 6295
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 ggggcggggc gagtccggag gactcctcgg actgcgcgga acatggcggt ctgggggttg
 120
 cgcgccgcgg cagccctccg gctgtggggc cgggtagttg aacgggtcga ggccggggga
 180
 ggcgtggggc cgtttcaggc ctgcggctgt cggctggtgc ttggcggcag ggacgatgtg
 240

agtgcggggc tgagaggcag ccatggggcc cgcggtgagc ccttggaccc ggcgcgcccc
300
ttgcagaggc ctcccagacc cgagggtgccc agggcattcc ggaggcagcc gagggcagca
360
gtctccagtt tcttcttttc gagtattaaa ggtggaagaa ggtccatata tttttctgtg
420
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480
gatgtagctg agctgattcg ggccagagcc tgccagaggg tggtagtcat ggtggggggc
540
ggcatcagca caccagtggt cattccagac ttcagatcgc cggggagtgg cctgtacagc
600
aacctccagc agtacgatct cccgtacccc gagggcattt ttgaactccc attcttcttt
660
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720
aacgtcactc actactttct ccggctgctt catgacaagg ggctgcttct gcggctctac
780
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840
gtcataggaa ctttgcctc tgccacctgc acagtctgcc aaagaccctt cccaggggag
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gacattcggg ctgacgtgat ggcagacagg gttccccgct gcccggctctg caccggcgtt
960
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1200
gttcacggcg tggaaagcct agtggagctt ctgggctgga cagaagagat gcgggacctt
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1320
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1380
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1440
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1560
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1620
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1680
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1740
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1800
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1860

ccgagctctgc tttctgtgcc tagttgaacg gcaagctcgg catctgttgg ttacaagatc
 1920
 cagacttggg ccgagcggtc cccagccctc ttcattgttcc gaagtgtagt cttgaggccc
 1980
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 2040
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 2091

<210> 6296

<211> 399

<212> PRT

<213> Homo sapiens

<400> 6296

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			20					25					30			
Ala	Cys	Gly	Cys	Arg	Leu	Val	Leu	Gly	Gly	Arg	Asp	Asp	Val	Ser	Ala	
		35					40					45				
Gly	Leu	Arg	Gly	Ser	His	Gly	Ala	Arg	Gly	Glu	Pro	Leu	Asp	Pro	Ala	
		50				55					60					
Arg	Pro	Leu	Gln	Arg	Pro	Pro	Arg	Pro	Glu	Val	Pro	Arg	Ala	Phe	Arg	
65					70					75					80	
Arg	Gln	Pro	Arg	Ala	Ala	Ala	Pro	Ser	Phe	Phe	Phe	Ser	Ser	Ile	Lys	
				85					90					95		
Gly	Gly	Arg	Arg	Ser	Ile	Ser	Phe	Ser	Val	Gly	Ala	Ser	Ser	Val	Val	
		100						105					110			
Gly	Ser	Gly	Gly	Ser	Ser	Asp	Lys	Gly	Lys	Leu	Ser	Leu	Gln	Asp	Val	
		115				120						125				
Ala	Glu	Leu	Ile	Arg	Ala	Arg	Ala	Cys	Gln	Arg	Val	Val	Val	Met	Val	
	130				135					140						
Gly	Ala	Gly	Ile	Ser	Thr	Pro	Ser	Gly	Ile	Pro	Asp	Phe	Arg	Ser	Pro	
145					150					155					160	
Gly	Ser	Gly	Leu	Tyr	Ser	Asn	Leu	Gln	Gln	Tyr	Asp	Leu	Pro	Tyr	Pro	
			165					170						175		
Glu	Ala	Ile	Phe	Glu	Leu	Pro	Phe	Phe	Phe	His	Asn	Pro	Lys	Pro	Phe	
		180					185						190			
Phe	Thr	Leu	Ala	Lys	Glu	Leu	Tyr	Pro	Gly	Asn	Tyr	Lys	Pro	Asn	Val	
	195						200					205				
Thr	His	Tyr	Phe	Leu	Arg	Leu	Leu	His	Asp	Lys	Gly	Leu	Leu	Leu	Arg	
	210					215					220					
Leu	Tyr	Thr	Gln	Asn	Ile	Asp	Gly	Leu	Glu	Arg	Val	Ser	Gly	Ile	Pro	
225				230						235					240	
Ala	Ser	Lys	Leu	Val	Glu	Ala	His	Gly	Thr	Phe	Ala	Ser	Ala	Thr	Cys	
			245					250						255		
Thr	Val	Cys	Gln	Arg	Pro	Phe	Pro	Gly	Glu	Asp	Ile	Arg	Ala	Asp	Val	
		260						265					270			
Met	Ala	Asp	Arg	Val	Pro	Arg	Cys	Pro	Val	Cys	Thr	Gly	Val	Val	Lys	
	275					280						285				
Pro	Asp	Ile	Val	Phe	Phe	Gly	Glu	Pro	Leu	Pro	Gln	Arg	Phe	Leu	Leu	
	290					295					300					
His	Val	Val	Asp	Phe	Pro	Met	Ala	Asp	Leu	Leu	Leu	Ile	Leu	Gly	Thr	

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305          310          315          320
Ser Leu Glu Val Glu Pro Phe Ala Ser Leu Thr Glu Ala Val Arg Ser
          325          330          335
Ser Val Pro Arg Leu Leu Ile Asn Arg Asp Leu Val Gly Pro Leu Ala
          340          345          350
Trp His Pro Arg Ser Arg Asp Val Ala Gln Leu Gly Asp Val Val His
          355          360          365
Gly Val Glu Ser Leu Val Glu Leu Leu Gly Trp Thr Glu Glu Met Arg
          370          375          380
Asp Leu Val Gln Arg Glu Thr Gly Lys Leu Asp Gly Pro Asp Lys
385          390          395

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<210> 6297

<211> 472

<212> DNA

<213> Homo sapiens

<400> 6297

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gacgccaaaga agctggtgcg ctccccgagc ggcctgcgca tggtgcccga acaccgcgcc
120
ttcgggaagcc cgttcggcct ggaggagccg cagtgggtcc cggacaagga gtgtcggaga
180
tgtatgcagt gtgacgccaa gtttgacttt ctcaccagaa agcaccactg tcgccgctgc
240
gggaagtgct tctgcgacag gtgctgcagc cagaagggtgc cgctgcggcg catgtgcttt
300
gtggaccccc tgccgcagtg cgcggagtg gccctggtgt cctcaagga ggcggagtgc
360
tacgacaagc agtcaaaagt gtcctgagc ggtaaggacg ggtgtcctgc acagtccctgc
420
gcgtccgcc agccggctcc tcgtgtctgt ggcgatgctg tgggctgtgc ac
472

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<210> 6298

<211> 146

<212> PRT

<213> Homo sapiens

<400> 6298

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Met Ser Ser Glu Val Ser Ala Arg Arg Asp Ala Lys Lys Leu Val Arg
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Ser Pro Ser Gly Leu Arg Met Val Pro Glu His Arg Ala Phe Gly Ser
          20          25          30
Pro Phe Gly Leu Glu Glu Pro Gln Trp Val Pro Asp Lys Glu Cys Arg
          35          40          45
Arg Cys Met Gln Cys Asp Ala Lys Phe Asp Phe Leu Thr Arg Lys His
          50          55          60
His Cys Arg Arg Cys Gly Lys Cys Phe Cys Asp Arg Cys Cys Ser Gln
65          70          75          80
Lys Val Pro Leu Arg Arg Met Cys Phe Val Asp Pro Val Arg Gln Cys
          85          90          95
Ala Glu Cys Ala Leu Val Ser Leu Lys Glu Ala Glu Phe Tyr Asp Lys

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	100		105		110										
Gln	Leu	Lys	Val	Leu	Leu	Ser	Gly	Lys	Asp	Gly	Cys	Pro	Ala	Gln	Ser
	115		120		125										
Cys	Ala	Leu	Arg	Gln	Pro	Ala	Pro	Arg	Val	Cys	Gly	Asp	Ala	Val	Gly
	130		135		140										
Cys	Ala														
145															

<210> 6299

<211> 1466

<212> DNA

<213> Homo sapiens

<400> 6299

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gcccatctcc gcgctggaga gcgatgcggc caagccagcg gaggcccccg acgctcccga
120
ggcggccagc cgcgccattg gcccgaggag agcctgggtc tgtaccactg gaccagctcc
180
ttcagctcgc agaaggtgcg gctggtgatc gccgagaagg gcctggtgtg cgaggagcgg
240
gacgtgagcc tgccacagag cgagcacaag gagccctggg tcatgctggc caacctgggc
300
gaggaggtgc ccgtcatcat ccaccgcgac aacatcatca gtgactatga ccagatcatt
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420
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660
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720
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780
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960
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1020
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1080
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1200

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 1260
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 1320
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 1380
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 1466

<210> 6300

<211> 372

<212> PRT

<213> Homo sapiens

<400> 6300

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Leu	Gln	Leu	Val	Ala	His	Leu	Arg	Ala	Gly	Glu	Arg	Cys	Gly	Gln	Ala
			20					25					30		
Ser	Gly	Gly	Pro	Arg	Arg	Ser	Arg	Gly	Gly	Gln	Pro	Ala	His	Trp	Pro
			35				40					45			
Arg	Glu	Ser	Leu	Val	Leu	Tyr	His	Trp	Thr	Gln	Ser	Phe	Ser	Ser	Gln
	50					55				60					
Lys	Val	Arg	Leu	Val	Ile	Ala	Glu	Lys	Gly	Leu	Val	Cys	Glu	Glu	Arg
65					70					75					80
Asp	Val	Ser	Leu	Pro	Gln	Ser	Glu	His	Lys	Glu	Pro	Trp	Phe	Met	Arg
				85					90					95	
Leu	Asn	Leu	Gly	Glu	Glu	Val	Pro	Val	Ile	Ile	His	Arg	Asp	Asn	Ile
			100					105					110		
Ile	Ser	Asp	Tyr	Asp	Gln	Ile	Ile	Asp	Tyr	Val	Glu	Arg	Thr	Phe	Thr
		115					120					125			
Gly	Glu	His	Val	Val	Ala	Leu	Met	Pro	Glu	Val	Gly	Ser	Leu	Gln	His
		130					135					140			
Ala	Arg	Val	Leu	Gln	Tyr	Arg	Glu	Leu	Leu	Asp	Ala	Leu	Pro	Met	Asp
145					150					155					160
Ala	Tyr	Thr	His	Gly	Cys	Ile	Leu	His	Pro	Glu	Leu	Thr	Thr	Asp	Ser
				165					170					175	
Met	Ile	Pro	Lys	Tyr	Ala	Thr	Ala	Glu	Ile	Arg	Arg	His	Leu	Ala	Asn
			180					185					190		
Ala	Thr	Thr	Asp	Leu	Met	Lys	Leu	Asp	His	Glu	Glu	Glu	Pro	Gln	Leu
		195					200					205			
Ser	Glu	Pro	Tyr	Leu	Ser	Lys	Gln	Lys	Lys	Leu	Met	Ala	Lys	Ile	Leu
	210					215					220				
Glu	His	Asp	Asp	Val	Ser	Tyr	Leu	Lys	Lys	Ile	Leu	Gly	Glu	Leu	Ala
225					230					235					240
Met	Val	Leu	Asp	Gln	Ile	Glu	Ala	Glu	Leu	Glu	Lys	Arg	Lys	Leu	Glu
				245					250					255	
Asn	Glu	Gly	Gln	Lys	Cys	Glu	Leu	Trp	Leu	Cys	Gly	Cys	Ala	Phe	Thr
			260					265					270		
Leu	Ala	Asp	Val	Leu	Leu	Gly	Ala	Thr	Leu	His	Arg	Leu	Lys	Phe	Leu
		275					280						285		
Gly	Leu	Ser	Lys	Lys	Tyr	Trp	Glu	Asp	Gly	Ser	Arg	Pro	Asn	Leu	Gln

290		295		300
Ser Phe Phe Glu Arg Val Gln Arg Arg Phe Ala Phe Arg Lys Val Leu				
305		310		315
Gly Asp Ile His Thr Thr Leu Leu Ser Ala Val Ile Pro Asn Ala Phe				
	325		330	335
Arg Leu Val Lys Arg Lys Pro Pro Ser Phe Phe Gly Ala Ser Phe Leu				
	340		345	350
Met Gly Ser Leu Gly Gly Met Gly Tyr Phe Ala Tyr Trp Tyr Leu Lys				
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Lys Lys Tyr Ile				
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<210> 6301

<211> 911

<212> DNA

<213> Homo sapiens

<400> 6301

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120
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180
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240
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300
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360
tccatgtgca tgaatggagg ggaagagaag ccttttgcct gccagttcc tggatgtaaa
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<211> 202

<212> PRT

<213> Homo sapiens

<400> 6302

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<211> 474

<212> PRT

<213> Homo sapiens

<400> 6306

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Pro Lys Arg Gly Leu Asp Val Asn Lys Cys Glu Ile Ala Arg Phe Phe		
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Lys Leu His Glu Arg Lys Cys Glu Pro Ile Ile Met Thr Val Pro Arg		
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Lys Ser Asp Leu Phe Gln Asp Asp Leu Tyr Pro Asp Thr Ala Gly Pro		
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Glu Ala Ala Leu Glu Ala Glu Glu Trp Phe Glu Gly Lys Asn Ala Asp		
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<210> 6307

<211> 2119

<212> DNA

<213> Homo sapiens

<400> 6307

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<210> 6309

<211> 564

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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What is claimed is:

1. An isolated nucleic acid molecule encoding a polypeptide comprising an amino acid sequence that is at least 85% identical to a polypeptide including an amino acid sequence selected from the group consisting of SEQ ID NO:2*n*, wherein *n* is any integer 1-3161, or the complement thereof.
2. The isolated nucleic acid molecule of claim 1, said molecule hybridizing under stringent conditions to a nucleic acid sequence complementary to a nucleic acid molecule comprising the sequence of nucleotides selected from the group consisting of SEQ ID NO:2*n*, wherein *n* is any integer 1-3161, or the complement thereof.
3. The isolated nucleic acid molecule of claim 1, said molecule encoding a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2*n*, wherein *n* is any integer 1-3161, or an amino acid sequence comprising one or more conservative substitutions in the amino acid sequence selected from the group consisting of SEQ ID NO: 2*n*.
4. The isolated nucleic acid molecule of claim 1, wherein said molecule encodes a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2*n*, wherein *n* is any integer 1-3161.
5. The isolated nucleic acid molecule of claim 1, wherein said molecule comprises the sequence of nucleotides selected from the group consisting of SEQ ID NO:2*n*-1, wherein *n* is any integer 1-3161, or the complement thereof.
6. An oligonucleotide less than 100 nucleotides in length and comprising at least 10 contiguous nucleotides selected from the group consisting of SEQ ID NO:2*n*-1, wherein *n* is any integer 1-3161, or the complement thereof.
7. A vector comprising the nucleic acid molecule of claim 1.

8. The vector of claim 7, wherein said vector is an expression vector.
9. A host cell comprising the isolated nucleic acid molecule of claim 1.
10. A substantially purified polypeptide comprising an amino acid sequence at least 80% identical to a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: $2n$, wherein n is any integer 1-3161.
11. The polypeptide of claim 10, wherein said polypeptide comprises the amino acid sequence selected from the group consisting of SEQ ID NO: $2n$, wherein n is any integer 1-3161.
12. An antibody that selectively binds to the polypeptide of claim 10.
13. A pharmaceutical composition comprising a therapeutically or prophylactically effective amount of a therapeutic selected from the group consisting of:
 - a) the nucleic acid of claim 1;
 - b) the polypeptide of claim 10; and
 - c) the antibody of claim 12;and a pharmaceutically acceptable carrier.
14. A kit comprising in one or more containers, a therapeutically or prophylactically effective amount of the pharmaceutical composition of claim 13.
15. A method of producing the polypeptide of claim 10, said method comprising culturing the host cell of claim 9 under conditions in which the nucleic acid molecule is expressed.
16. A method of detecting the presence of the polypeptide of claim 10 in a sample, comprising contacting the sample with a compound that selectively binds to said polypeptide under conditions allowing the formation of a complex between said polypeptide and said

compound, and detecting said complex, if present, thereby identifying said polypeptide in said sample.

17. A method of detecting the presence of a nucleic acid molecule of claim 1 in a sample, the method comprising contacting the sample with a nucleic acid probe or primer that selectively binds to the nucleic acid molecule and determining whether the nucleic acid probe or primer bound to the nucleic acid molecule of claim 1 is present in the sample.

18. A method for modulating the activity of the polypeptide of claim 10, the method comprising contacting a cell sample comprising the polypeptide of claim 10 with a compound that binds to said polypeptide in an amount sufficient to modulate the activity of the polypeptide.

19. The use of a therapeutic in the manufacture of a medicament for treating a syndrome associated with a ORFX-associated disorder, wherein said therapeutic is selected from the group consisting of:

- a) the nucleic acid of claim 1;
- b) the polypeptide of claim 10; and
- c) the antibody of claim 12.

20. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) contacting a test compound with the polypeptide of claim 10; and
- b) determining if said test compound binds to said polypeptide,

wherein binding of said test compound to said polypeptide indicates the test compound is a modulator of activity or of latency or predisposition to an ORFX-associated disorder.

21. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) administering a test compound to a test subject at an increased risk ORFX-associated disorder, wherein said test subject recombinantly expresses a polypeptide encoded by the nucleotide of claim 1;

- b) measuring expression the activity of said protein in said test subject;
- c) measuring the activity of said protein in a control subject that recombinantly expresses said protein and is not at increased risk for an ORFX-associated disorder; and
- d) comparing expression of said protein in said test subject and said control subject, wherein a change in the activity of said protein in said test subject relative to said control subject indicates the test compound is a modulator or of latency of predisposition to an ORFX-associated disorder.

22. The method of claim 20, wherein said test animal is a recombinant test animal that expresses a test protein transgene or expresses said transgene under the control of a promoter at an increased level relative to a wild-type test animal, and wherein said promoter is not the native gene promoter of said transgene.

23. A method for determining the presence of or predisposition to a disease associated with altered levels of a polypeptide of claim 11 in a subject, the method comprising:

- a) measuring the amount of the polypeptide in a sample from said subject; and
- b) comparing the amount of said polypeptide in step (a) to the amount of the polypeptide present in a control sample,

wherein an alteration in the level of the polypeptide in step (a) as compared to the control sample indicates the presence of or predisposition to a disease in said subject.

24. The method of claim 23, wherein said subject is a human.

25. A method for determining the presence of or predisposition to a disease associated with altered levels the nucleic acid molecule of claim 1 in a subject, the method comprising:

- a) measuring the amount of the nucleic acid in a sample from the mammalian subject; and
- b) comparing the amount of said nucleic acid in step (a) to the amount of the nucleic acid present in a control sample,

wherein an alteration in the level of the nucleic acid in step (a) as compared to the control sample indicates the presence of or predisposition to said disease in said subject.

26. The method of claim 25, wherein said subject is a human.

27. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject polypeptide of claim 10 in an amount sufficient to alleviate or prevent said pathological condition.

28. The method of claim 27, wherein said subject is a human.

29. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject nucleic acid molecule of claim 1 in an amount sufficient to alleviate or prevent said pathological condition.

30. The method of claim 29, wherein said subject is a human.

31. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject antibody of claim 12 in an amount sufficient to alleviate or prevent said pathological condition.

32. The method of claim 31, wherein said subject is a human.